

State PCS Success Program (SPS)

UPPSC (Mains) - 2022

Essay – Fodder Point



Section - A

Q.1) Is there modernity without westernization?

क्या पश्चिमीकरण के बिना कोई आधुनिकता है?

Dear candidates,

This topic is an evergreen one, topics on globalization, modernization, westernization are asked in many ways. However, since there has been a trend towards protectionism so globalization becomes an important topic. Moreover, various clashes that are going on due to the difference between several local and western values this topic gains more importance.

The demand of the question is quite broad since you have to include all the aspects of modernization and westernization like social, political, cultural, and educational among others, However, don't divulge much from the topic or it may look like a topic on traditionalism vs modernization.

Introduction of the essay should catch the attention of the examiner and should also tell about what is going to be there in next few pages, you can either introduce with an anecdote on how a western idea may not always be the right idea or through asking some fundamental questions regarding westernization. Conclusion of an essay should be such that it should attract the attention of the examiner and leave him/her with a good taste. So, special care should be taken while introducing and concluding an essay. An essay can be introduced in multiple ways, there is no fixed formula or pattern for it. Some of the popular introductions could include.

- 1) Using an anecdote/story
- 2) Asking questions
- 3) Some quotes
- 4) Some Facts from reports or commissions

E.g. -

If we ask ourselves certain questions like-

Shall I only be called a modern person if I indulge in love marriage or I'm independent of my parents? Should I prefer to be a capitalist, a materialist, a hedonist to become a modern person? Shall I be considered modern only if I listen to rock music? The answer to most of the questions, in general, would come out to be a yes. Do you think it is modern to be all of the above? No, this is being western. This misconception is because we have for long misinterpreted modernization with westernization.

Post-independence, many newly independent countries focused on rapid socio-economic development like that of the west. To achieve the level of western development that too in a short period they emulated similar ideas and imposed similar conditions across their systems like that of the west. For example, focusing on gross domestic product, per capita income, the extent of poverty and demonizing traditional values and practices.

This mad rush for growth led to a situation where modernization became synonymous with westernization. However soon it was realized that aping the western ideas was not going to work for these countries since they had a different environment and socio-economic conditions. In this light, a concept of modernization which was be different from westernization came up.

Now you have to define the concept of modernization, what are the ideas that it stands for and how it is different from westernization in general.

Modernization refers to a model of a progressive transition from a 'pre-modern' or 'traditional' to 'modern' society. It includes the acceptance and enactment of new ideas like Scientism, rationalism, equality, secularism, justice, liberty, democracy, rule of law, fraternity, freedom of expression, change in attitude, norms and values, high aspirations, and an open society. It is the concept of bringing culture and society, into the current standard of existence so that to keep relevance and pace with the current times.

This modernization can be achieved without blindly copying the western ideas, norms, and culture of human, economic and social development. That is to say that there are several ways to be modern rather than just imitation of the west.

Explain the main theme of the essay as to how modernity can be achieved without westernization. Try to include as many aspects of life as possible.

Historical aspect- Historically in India, we have experienced modern ideas since time immemorial. Political system prevalent during Rig-Vedic times emphasized on the participation of all sections including women in various local-level decisions. For example, Sabhas and Samitis had common people participation in the legislature which reminds us of the modern value of democracy and ideas of women empowerment. Saints like Buddha and Mahavira advocated upliftment of women, untouchables and other lower strata of society. They were unequivocal in their ideas of equality of everyone irrespective of caste, class, and gender. These ideas highlight the modern values of equality. Modern ideas were also propagated by several rulers.

E.g. Ashoka's Dhamma was a cultural conquest rather than a military one. It was to create a harmonious atmosphere in the state where everyone irrespective of religion and **cultural diversities** lived in **peace and harmony** with each other. Similarly, Akbar's policy of universal peace (Sulh-i-kul) also provided modern values. These values resembled modern ideas of peace, harmony, and tolerance but were not essentially western.

Social aspect- Social networking and close coordination among people have been the ethos of eastern societies. Recently the importance of the concept of 'Social capital' has been doing the rounds in the western world, which has been followed throughout history in the eastern societies. Indian society is based on integration, respect for each other and elders for example greetings through Namaskaram (salutation) and touching feet of elders and teachers are ubiquitous in India. Whereas in individualistic western societies there is high self-ego. Thus, such societies are more of individualistic as against communitarian or socialist societies of the east like Russia and China.

Cultural aspects- Clothing in India societies have been as per the agro-climatic conditions of the region which represents its utility. For examples wearing a tuxedo with a bow tie in the scorching heat in summers in Delhi is neither rational nor modern, on the other hand wearing a well-ventilated dhoti-kurta in Chennai seems more logical.

Eating habits in India include a complete Thali comprising pulses, vegetables, wheat, rice along with chutney and salad thus ensuring a balanced diet. On the other hand, the increasing culture of stale and junk food consumption due to paucity of time is essentially a western concept leading to various lifestyle diseases. For example, as per the United States Centre for Disease Control, 40% of Americans are Obese which is mainly linked to fast food and high calorific food consumption.

Westernization focuses on materialism and hedonistic tendencies like affluence, extravagance, wastage, and show-off. On the other hand, happiness in eastern cultures lies in contentment, spiritual upliftment,

and peace of mind. For example, while Bhutan focuses on Gross Happiness Index as a measure of development; Gandhiji idealized 'Saada Jeevan Uchha Vichar' i.e. simple living, high thinking.

Fitness in western culture generally means pumping iron in the gymnasium to build muscles and thus the style or fashion is developing six pack abs. This ignores the damage to the health it creates in the long run. On the other hand, yoga creates both mental and physical easement and improves your bodily functions along with energizing the whole system. This culture which has been going on for centuries in India is now increasingly being recognized across the world. Recently 21st June of every year is declared by the United Nations as International Yoga Day.

Health and wellness in the western world are based on the idea of quick relief, palliative, and curative treatments. On the other hand the eastern medicine system of Ayurveda, Unani, Siddha, Sowa-Rigpa, and Homeopathy is based on overall wellness and focuses on preventive care. For example, Unani medicine of Perso-Arabic system of medicine helps in dealing with problems associated with a fast lifestyle like stressful workload and odd eating habits.

International aspect- Many of Asian countries like China, Japan, and Malaysia have achieved modernization without essentially being westernized especially due to their political philosophies and culture. For example, China and Russia achieved rapid socio-economic development without strictly following the ideals of democracy and Japan achieved the same without having to build a strong military might, unlike the western world.

The western idea of international relation generally ends up in the concept of Matsanyaya i.e big fish eating the small fish or Darwinian idea of survival of the fittest, for example, USA's coercing and arm twisting for hegemony. On the other hand, modernization may include the feeling of mutual respect, non-interference in internal affairs, peaceful coexistence and equality in cooperation. For example, Panchsheel, Wuhan spirit, Non-alignment movement and Gujaral doctrine of India are non-western.

Although Globalization is considered as a west led idea, our scriptural idea of "Vasudhaiva- Kutumbakam" which translates into "World is one family" is in place since ancient times. For example, ancient silk route connected east with the west and was central to the economic, political, religious and cultural interaction between these regions from the 2nd century BCE up till 18th century CE.

Economic aspect- Capitalism of the western world focuses on numbers for example GDP growth rate, high net worth, profit margin and turnover. This ignores the basic human development which in turn generates huge inequality in the society. On the other hand, Human Development Index developed by Mehboob Ul Haq and Amartya Sen focus on social indicators like health and education, which also reflects the conditions of marginalized sections of society and was later adopted by United Nations as a true indicator for a nations' progress.

The development in the west is signified by urbanization which means building skyscrapers, multinational Corporations, fast mobility and internet connectivity which is a top-down model of development based on trickledown effect. Whereas the actual modernization would mean lifting the most marginalized (Antyodaya) sections of society out of poverty and misery who might be found in rural and countryside areas. For example, Gandhi's concept of rural development highlighted self-sufficiency and bottom-up approach of development which focuses on small scale village and cottage industries. This model rejects the mindless growth which ignores the environmental aspect leading to rampant deforestation, increasing air, water, and land pollution and climate change.

While the western concept of development is based on mass production where humans are treated as a machine to increase production efficiency, Japanese Management also known as Theory Z focuses on

building employer-employee relations through employee loyalty by providing a job for life with a strong focus on the well-being of the employee, both on and off the job. Also, the model of **trusteeship** and the concept of **bread and labor** of the east highlights the synergy between worker and management. Ringi system of Japan is famous for consensus-based decision making considering all the aspects of the problem at hand. The culture of presenting business cards in Japan is a custom known as Meishi Koukan. While the Western business card is something meant for future reference, Meishi is a way of soothing communication by revealing one's true status.

Agriculture in the western world is essential resource-intensive like heavy use of fertilizers, pesticides, genetically modified (GM) seeds, and heavy mechanization which although increases production in short term but leads to problems soil degradation, environmental pollution, and food contamination. On the other hand, concepts like organic farming, zero budget natural farming (ZBNF), integrated farming practices like mixed farming focuses on the modern idea of protecting overall ecology of the land and soil along with promoting self-sufficiency to marginal farmers. Similarly, AMUL a successful business model based on cooperative farming promotes the welfare of not only farmers but also animals as against the western concept of contract farming.

Political aspect- Westernization inherently is built on the state's might, coercion, suppression of dissent, the sovereignty of the state and empire building. Whereas the modern values would include ideas like equality of rights, consensus building, persuasion, respect for others, the sovereignty of the people based on moral authority and inclusion are visible in Gandhiji's concept of Ram Rajya.

Politics of development in the west has long been based on imperialism which promotes tools of power capture, colonization and divide, and rule to ensure efficiency, effectiveness, and economy. Politics in the west has been a profession to capture power. Concepts like lobbying, horse-trading are essentially western in origin. Sarvodaya model, on the other hand, doesn't consider politics as an instrument of power rather an agency of service. Gandhiji said that Rajneeti will yield place to Lokniti.

Concept of secularism in western parlance talks about the crude separation of state and church, thus devoid the state of moral ideas of respect, love, compassion, and tolerance as enshrined in all the religions of the world. Modern ideas would demand that the state should embrace all the religion equally which is upheld by the idea of Sarva Dharma Sama Bhava which signifies the equality of the destination of the path's followed by all religions (although the paths themselves may be different.)

Technological aspect- Right from the time of industrialization, innovation, and excellence has been linked to profit-making. For example, the patent system is considered to be the motivating factor behind innovation. This though has led to rapid growth in science and technology but has been again not distributive. For Example, for years the poor in Africa were dying of AIDS while the patent holder of medicine was not willing to share it without proper royalty.

Modernization would include science and technology as a tool for socio-economic transformation of the society. It should assist humans and should not replace them as workers.

For example, developments in labour intensive sector, promotion of generic medicines for cheap availability of life saving drug and Massive Online Open Course which is an open source of educational material. Science and technology should be based on the needs of the local rather than just ivory tower innovations. For example, Lab to farm and farm to fork technologies.

Educational aspect – Role of education means understanding your inner self and surroundings and not only serve the society but also cherish the inherent value of life. The western education system is job centric (for developing skill only), discriminatory (different for rich and poor) and commercial (profitability).

However, the Gurukul system based on the "Guru-Shishya Paramapara" focuses on both providing skills as well as value. It focuses on the holistic development of an individual to become a responsible and cultured citizen of society. Students from all walks of life came and get educated as equals as all sit near guru at equal footing to gain knowledge.

Now you can show that westernization also helped a lot in acting as stepping stone for modernization in many societies. Again you have to mention many dimensions of westernization.

Despite many reservations against the concept of westernization, it has been an instrument that has provided the basic foundation for many societies to transition from traditional setup to modernity.

"Rather than trying to reinvent the wheel, build on to that which is already excellent." -Auliq Ice

Historical aspect- Westernization spurred the industrial revolution across the world. Inventor builds remarkable machines like the steam engine, printing press, telephony and replaced the strength of human and animal by the machine. This led to an increase in trade and commerce, creation of the working class, rise of production and consumption thus making the world more modern. For example, Japan -In the Meiji period (1868-1912), adopted the practices of the west like heavy industrialization, research, and development, adoption of the western-oriented education system for the young. This made Japan one of the most advanced countries of the world.

Economic aspect- Though the western neo-liberal business model focuses more on numbers like high GDP growth, turnover, and profit numbers, it also creates more jobs and improved standards of life for the common man and uplifted billions across the world out of poverty. As per the World Bank since the introduction of LPG model in India, the number of poor has decreased substantially from 440mn to 230mn in 2011.

Concept of Corporate governance is a gift of the west which has promoted several modern values of protection of interests of different shareholders, transparency, and accountability, for example, CSR (corporate social responsibility) promotes a responsible business and protects the interests of society.

Similarly, concepts like LPG (liberalization, privatization, globalization), NPM (new public management) are essentially west led which have provided for a more efficient and effective system of economic growth and have made several countries modern. For example, Economies of Hong Kong, Singapore, South Korea, and Taiwan, generally referred to as the four Asian tigers, underwent rapid industrialization and maintained exceptionally high growth rates due to various neoliberal policies of the west like export orientation and a free market.

Technological aspect- Innovations and technologies in the western world like that invention of the computer, airplanes, telephones, diesel engines ultimately led to technology transfer along with opening new dimensions of development in the rest of the world. The recent wave of innovations like A.I, internet of things, 4th industrial revolution, cloud technology, automated vehicles, block chain technology also has their genesis in the western world which altered the way we live eat think. For example, the Andhra Pradesh government has used block-chain technology for land record modernization.

Cultural aspect- Westernization has led to phenomena called globalization which means increased interdependence, interconnectedness, this, in turn, has led to the free flow of ideas, increased tourism, the spread of culture and traditional practices like food, festivals, music. This process acculturation and assimilation has enhanced the values of tolerance, acceptance, and syncretism in society.

Political aspect- Several newly independent countries also adopted western concepts like rule of law, democracy, freedom of expression, liberty, equality and justice in their nascent polity and constitution. For example, the Indian constitution borrowed ideas like liberty equality and fraternity from France and fundamental rights from the USA. Similarly, the concept of the parliament which is envisaged by many of the countries of the world is borrowed from the Magna Carta of 1215 CE.

Administrative aspect- Various governance processes which enhance the delivery of public services, ensure accountability transparency and responsiveness of government of the day are borrowed from the west. For example, right to information, right to service, citizens' charter, whistle-blower protection, ombudsman among other ideas have originated in the western world.

Various administrative structures and its functions may it be police force, defence forces or the welfare-related departments across the world are premised on the west. For example, the whole administrative edifice of almost all the countries of the world is based on the western idea of bureaucracy which is based on hierarchy, division of work, scientific approach among others.

Way forward should include certain pre conditions to achieve modernization and how modern values rather than mere westernization in various fields should be the basis of modernization. Also write about utilizing the best of both the ideas.

Westernization is not a necessity but there is a need to modernize not only to evolve and realize our full potential but also to be able to compete and keep pace with the fast-moving world of the present 21st century.

To achieve modernization there are certain preconditions like the willingness of the people to transform from traditionalism to modernism, emotional preparedness of dynamic and devoted leadership towards the cause of modernism, availability of opportunities, awareness of the people to accommodate new technology conditions.

Certain aspects then act as instruments or vehicles of modernization like education, charismatic leadership, developed mass communication and decisive government authority, elites, public intellectuals.

Various modernizing initiatives across history include Abraham Lincoln's movement against slavery, the French revolution's motto of Liberty, equality, and fraternity, fight against child marriage, Sati, widow remarriage in India were taken up by socio-religious reformers like Ishwar Chandra Vidyasagar, Raja Ram Mohan Roy, and Swami Vivekananda, Gandhi's concept of truth and non-violence, and Japan's pacifist approach after second world war which aimed at international peace, justice and order. These are some of the historical initiatives which can be emulated across the cultures and nations to modernize the society.

In the political arena, there is a need to have visionary leadership and lawmakers who are committed to constitutional values, fellow human beings and the unity and integrity of the nation. They will become the agents of change in the society with their deep deliberation and inclusive nature to carry everyone along the progressive journey of the nation. For example, the idea of Sabka Saath, Sabka Vikas, Sabka Vishwas.

Our administrative framework should be based on pillars of rule of law, service excellence and probity. It should symbolize the change in colonial administrative mindset to selfless service orientation and the making of a corruption-free and clean administration. For example – Sevottam model of excellence in service delivery by DARPG in India, Citizen's Charter by John Major and Ombudsman of Sweden.

Economic efficiency and effectiveness are critical forces behind the modernization of any country. Attributes, like protecting the interest of all stakeholders, full disclosure, sustainable and responsible

development practices and following trusteeship model and adopting higher ideals of corporate governance like corporate social responsibility as against narrow ideas of profiteering and resource exploitation, will act as the modernizing force in the economic arena. For example – Ratan Tata not only displayed good business acumen but also commitment towards social service and community philanthropy while following ethical business practices.

Modernization does not mean the elimination of all traditional and ancient values. Those ancient values are to be preserved and protected along with induction of modern ideas. Conflicts and problems are bound to arise, but a dynamic leadership with a progressive and modern outlook is required to solve these problems in time. For example, preservation of tribal culture and ancient heritage, greater push to Ayush, international exposure of practices like yoga are some of the initiatives taken up by India.

"It is idle mendicancy to discard our Own and beg for the foreign", while, at the same time "it is the abjectness of poverty to dwarf ourselves by rejecting the foreign". Rabindranath Tagore

To reap the benefits of both the worlds of modernity and westernization we need to think global and act local. Various technological developments, ideas, and agreements at regional and international level provide us with the vision and mission and the tools to achieve them, whereas the actual needs of the locals and their implementation depends on the local conditions and people. For example, the direction to counter climate change has been set by Rio earth summit which provided for Kyoto Protocol and Paris agreement, however various adaptation and mitigation measures like traditional water harvesting techniques of Johad, baolis, taanka and below sea level farming of Kuttanad, Kerala are local initiatives for the same. This shows that many local practices can also be modern.

The idea of **Progressivism** believes in progress towards modernity, without sacrificing the least traditional elements, and taking the best of westernization. Rather than either blindly banning the western ideas of blindly aping them, we should view it through scientific outlook, tolerance, and respect for others point of view and without any coercive imposition. This would provide for sustainable economic development, equitable distribution of resources, and creation of a just, moral, culturally vibrant and religiously syncretic society in a faster and planned manner.

Gandhiji rightly said that we need to be open to foreign ideas but after filtering them on the slow flame of indigenous culture so that to remove unwanted gases.

Q.2) Women education is women empowerment.

नारी शिक्षा नारी सशक्तिकरण है।

Introduction**#1 Through quotation-**

“There is no greater pillar of stability than a strong, free, and educated woman.”

- Angelina Jolie

“There is no chance of the welfare of the world unless the condition of the women is improved.”

- Swami Vivekanand

#2 Through anecdote-

As a young girl, Malala Yousafzai defied the Taliban in Pakistan and demanded that girls be allowed to receive an education. She was shot in the head by a Taliban gunman in 2012 but survived. In 2014, she became the youngest person to receive the Nobel Peace Prize. She said- “The extremists were, and they are, afraid of books and pens. The power of education frightens them.”

#3

There are several ways to define woman empowerment. But simply put it refers to raising the status of woman through promoting equal rights for them vis-à-vis man. Education provides women knowledge, skill and confidence. It also helps women respond to **challenges, access to opportunities and change attitudes** and outcomes for themselves. It is the **foundation of economic empowerment of women**. Mainstream feminism sees economic empowerment as the key to realizing empowered women.

Body Content**#1 Historical Perspective**

It is not possible for a bird to fly on one wing”. Traditionally, women in Vedic India had **fair access to education and they enjoyed great social status**. They participated in Vedic sacrifices and chanted mantras. Texts prove that some of the hymns of the Rigveda were composed by women. We get references of such learned ladies as Lopamudra, Maitreyi, Gargi and others. Maitreyi, the wife of an ancient philosopher Yajnavalka, used to hold discussion on complex philosophical questions with her husband.

The decline in the status and education of women began in the later Vedic period, when Brahmanical practices barred women from Vedic education. The remaining damage was done by Manusmriti, a so-called family code which reduced her **status to a dependent** in the society. Manusmriti dictated that “in childhood a female must be subject to her father, in youth to her husband, when her lord is dead to her sons”, thus handcuffing the independence of the women. This decline of educational status of women continued for several centuries even till today leading to numerous incidental problems like role assignment, poor labor force participation, secondary status in family, economic dependence, political untouchability, crime against women and exploitation due to oblivious of legal-democratic rights.

#2 Current Status

The traditional Indian imagination of women almost takes it for granted that home is where the women belong. This thinking of confining the role of women to household chores like cooking, cleaning, childcare

etc. means ever since her birth the focus of society is to make her learn these tasks instead of good primary and higher education; the result of which is detrimental to confidence of women.

Women's enrolment in higher education, which was less than 10% of the total enrolment on the eve of Independence, has risen to 48.6% in 2018-19. Yet, India in 2021 has slipped 28 places and has been ranked 140th among 156 nations participating in the world economic forum Gender Gap report rankings. The report is a measure of gender gap on four parameters: economic participation and opportunity, educational attainment, health and survival, and political empowerment. The gap on educational attainment and health and survival has been bridged. So, it's safe to assume there is more to women empowerment than just access to education.

Also, while access to education in Quantitative term has improved, women enrollment in promising sectors of engineering and technology is abysmally low.

There are various challenges to women empowerment like- Socially, it is said that a woman works for more time than their male counterparts although most of their contribution is in unrecognized caregiving and household jobs. Also, a woman is routinely subjected to violence in various forms like infanticide, marital rape etc.

Poor access to education means that women do not possess the skills to be employed thus leading to poor female labor force participation, presently at 20%. As it is, domestic work does not produce any goods or services it is unpaid and not reimbursed, neither calculated in GDP calculations. Non-employability reduces the chances for women to improve their lives in terms of finances and healthcare for them and their families. Most to suffer here are vulnerable SC/ST, minority, single women who fall in the trap hunger and poverty.

Similarly, since the woman is not an earning member of the she must live the life of a dependent. Women often compromise on health, food, nutrition and other parameters for the sake of their families. This inculcates a culture in the family that women come last and further strengthens the prevalent patriarchal constructions, affecting women's Right to life and liberty guaranteed under Article 21 of the Indian Constitution.

The lack of education results in lack of economic independence. This dependence further affects the mentality of women. She does not have the necessary wherewithal to learn, study, acquire skills, make independent decisions etc, thereby, trapping women in a web of deprivation.

Further, non-education leads to non-participation of women in political sphere and nation building processes. Women do not exercise independent adult franchise. They neither represent themselves well in Parliament, Assemblies, bureaucracy or the judiciary.

Non-empowered women are not aware of their legal rights, which often make them prone to abuses like domestic violence, harassment at workplace, sexual crimes and online crimes. This in turn forces them to live under the same circumstances, without being able to change them.

It is surprising that most of these problems are associated directly to the education of women. B R Ambedkar had once said, "I measure the progress of a community by the degree of progress which women have achieved." Education is fruitless without educated women and agitation is incomplete without the strength of women."

Our freedom struggle is dotted with examples of what educated, empowered women like Sarojini Naidu, Nalini Sen, Usha Mehta, Aruna Asaf Ali can achieve. Modern examples like Kiran Majumdar Shaw (Biocon),

Saumya Swaminathan Yadav (WHO Chief scientist), Ritu Karidhar (Rocket women of India) only strengthen the present case for women education.

#3 Woman Empowerment Way Forward:

There is a need for sustained State intervention along with participation of NGOs, Market and other stakeholders if women empowerment through education is to be achieved.

Foremost is to strengthen the Fundamental Right to Education. The RTE must not just remain another right but should trickle down to the last in line, especially rural women and in particular SC, ST, OBC and minority women. The school dropout rates must be controlled and schemes like Mid-Day meal be revamped. A strong school education is the foundation of empowerment.

Incentives must be provided to women at Higher education like scholarships, hostels, concessional educational loans, digital online course and reservations. Focus should be to attract women also in the field of Science, Technology, Engineering and Mathematics (STEM). Re-inventing schemes like Dhanlakshmi, DRDO women scholarships and AICTE Pragati scholarships, SWAYAM is needed to make education more accessible and affordable.

Participation of NGOS like SEWA, Snehalaya, Vimochana and Northeast Network is crucial. The state may not reach where the NGOs can and thus fill the crucial plugs in the gaps. Work of SEWA since 1972, under Ela Bhatt has seen lot of success. SEWA has helped more than 1 million poor self-employed women in income security, food security, and social security, which includes health care, childcare, insurance, pension, and housing.

In addition to that, the focus of State must be on developing skills through schemes like Nayi manzil, Humsafar, Priyadarshini. The skilled and semi-skilled womanpower will increase the labour force participation and ultimately contribute to individual and national development. According to an estimate by World Economic forum the India GDP has potential to increase by 17% if female labour force participation is realized well.

Lastly, sufficient legislative and judicial interventions are needed for overall empowerment of women. Despite education, women will hesitate to be part of political democracy. Reservations in Panchayats, Assemblies and Judiciary can be good starts. Strong legislations and stronger implementation are needed for laws related to women education, women security & crime, sanitation, healthcare and equal wages.

Financial independence and skills developed through a formal education enable women to break the chain of bondage and deprivation. It gives the strength to step out and learn the ways of this world, instead of confinement to the household chores. Education of woman plays the most vital role in the overall development of the country. It is thus necessary to look at this education as the development of half of the human resources of a society.

The empowerment and autonomy of women and the improvement of their political, social, economic and health status is a highly important end in itself.

Music artist Brian Bingham has said, "You educate a man; you educate a man. You educate a woman; you educate a generation". It is a simple fact that educating a woman results in educating her children and her family. This creates a ripple effect in the society. Ultimately, the result is the empowerment of large number of women and the society as a whole.

Education paves the way for women empowerment but education alone is not enough.

Q.3) Federalism in India- a paradox.**भारत में संघवाद— एक विरोधाभास।****Introduction:****#1 Quotation based**

- “Federalism means the distribution of force of the state among a number of coordinate bodies each originating in and controlled by the constitution.”- Dicey
- “Indian Union is a unitary state with subsidiary federal features rather than a federal state with subsidiary unitary features.” - KC Wheare
- “The two factors have been responsible for increasing the unitary bias (tendency of centralisation) of the Constitution. These are: (i) the dominance of the Centre in the financial sphere and the dependence of the states upon the Central grants; and (ii) the emergence of a powerful erstwhile planning commission which controlled the developmental process in the states. He also observed: “India has practically functioned as a unitary state though the Union and the states have tried to function formally and legally as a federation.” - K Santhanam,
- “The Indian Constitution is mainly federal with unique safeguards for enforcing national unity and growth”. - Ivor Jennings
- Indian federalism as a “cooperative federalism”. He said that though the Constitution of India has created a strong Central government, it has not made the state governments weak and has not reduced them to the level of administrative agencies for the execution of policies of the Central government. He described the Indian federation as “a new kind of federation to meet India’s peculiar needs”. - Granville Austin
- “Federalism is no longer the fault line of Centre-State relations but the definition of a new partnership of Team India. Citizens now have the ease of trust, not the burden of proof and process. Businesses find an environment that is open and easy to work in.”- Narendra Modi

#2 Definition based

Federalism is a form of government in which the sovereign authority of political power is divided between the various units. This form of government is also called a "federation" or a "federal state" in the common parlance. These units are Centre, state and panchayats or the municipalities. The centre also is called union. The component units of the union are called variously as states (in the United States of America), Cantons (in Switzerland), Provinces (in Canada), Republics (in the former Union of Soviet Socialist Republic). Literally, the word 'federal' comes from Latin word 'foedus' which means contract. A federal union is a contractual union. A federal state is a state brought into being through a contractual union of sovereign states. The union of states by conquest cannot be called a federal union. It means that the sovereign units—union, states or local units, form a federation on the basis of mutual and voluntary agreement. This kind of voluntary union federation is possible only in a democratic framework. It also means that the extent of division is limited. The contracting parties never surrender their complete authority power. Thus, when two or more sovereign states unite voluntarily, they retain their internal/local autonomy and unite only on matters of common interest. Therefore, **James Bryce declared that 'A federal state is a political contrivance intended to reconcile national unity and power with the maintenance of state rights.'**

Body Content :

Federalism refers to the distribution of powers between two or more levels of government in the modern nation-state system, The distribution of power may be between the Nation, state or local level. The powers are distributed in such a way that there is independence between the nation and State Government in their respective jurisdiction. Various Federal countries in the world are United States (US), Canada, Switzerland, Australia and India. In India, the federation is little different, wherein the geographically vast and culturally diverse state gives autonomy to its provinces for administrative convenience and for representing the regional interests. Such type of federation is called “holding together” federation.

Indian Federalism with strong Centre

In the Indian federation, Powers are distributed between two tiers of government, i.e., at the national level and the state level with strong centre. According to political scientist, Philip Mahwood, developing countries like India, which are culturally diverse choose federalism merely not only for administrative requirements but for the very survival of the nation. But the framers of Indian Constitution refrained from creating a fully federalized political system in India at the time of the country's independence, because of the fear of further disunity and secessionist tendencies in the country which was already being subjected to partition.

During formation of constitution, strong centre was favored, as a weak central authority would be incapable of ensuring peace, coordinating matters of common concern and maintain political stability. There have been several features which make the centre strong. Few but not all are; The union parliament has been given the unilateral discretion to reconstruct the boundaries of the states, the Union list contains more subjects than the State list, In case of a deadlock between the Union and states over subjects in the concurrent list, the Union law prevails, the union parliament can also legislate on any state subjects under extraordinary circumstances, the union government also has sweeping economic superiority in terms of resources as well as in its discretion in allocating resources to the states. Single Constitution for both Union and State governments along with Institutions of governance like single system of courts, all-India public services and integrated audit machinery and the integrated election machinery.

Political History of Indian Federalism:

The Indian Constitution has an inherent bias for the Union government. For example, Article 1 describes India as a ‘Union of States’, and not ‘Federation of States’, because federation in India has not been formed due to an agreement between the federating states and secondly, the states in India do not have the right to secede, therefore its called Union of states as its indestructible. India is “quasi-federal” wherein there is a unitary state with subsidiary federal features rather than a federal state with subsidiary unitary features.” In India, through formation of coalition government regional parties have tried to have influence over the centre and policy making.

First Phase, One-party Federalism: In this phase, the influence of the regional leaders within the “Congress System” and the rise of linguistic autonomy movement marked the rise of the regional assertion over the national politics which consolidated the federal spirit right from the time of Indian independence. After Independence, INC emerged as the dominant party in centre and even in states, regional Congress leaders had a mass base of their own and possessed considerable power and influence in their respective states. Thus during 1952–67, there was co-existence of national and state leadership in their respective realms of influence with a consensual model of inner party federalism that marked the era of Congress dominance.

Second Phase, 'Expressive' Federalism: After 1967, there was tussle for power and single party federalism was not at work. In 1967 elections, Congress Party suffered a drawback due to which many regional parties and anti-Congress coalitions Governments were formed in the states, marking the emergence of an era of "expressive" and more active and directly conflictual federal dynamics between the Congress-led centre and the opposition parties-led state governments. Also, during this phase, due to lack of coordination of between the centre and state parties, the mass base of Congress in the state started declining. In 1977, when the Janata Government took over, there was confrontational centre-states relation as the federal power positions were occupied by opposing political parties. The Congress party was at the Centre and anti-Congress political bloc - comprising of major regional parties- were in power in many states. The Centre frequently resorted to invoking Article 356 to tame the "recalcitrant" states, the excessive use of President Rule was a classic example of conflictual nature of federalism.

Third Phase, Multiparty Federalism: In the late 1980s, a number of emerging political, economic and institutional factors led to the "reconfiguration of Indian politics, wherein the dominance of congress was put to an end and then began the era of coalition politics at the national level which shaped the federal dynamics in two ways. First, the coalition governments in the early years led by non-Congress and non-BJP parties, many of which were regional outfits, tried to lead the country and provide decentralised governance but they were fragile and short-lived for their long-term effect there needs to be a stable party like Congress or BJP at the centre and these regional parties supported a national party which fulfilled State demands, which led to multi party federalism.

Fourth Phase: The return of 'Dominant Party' Federalism

After 2014, BJP gained popularity through PM Narendra Modi, there began renationalisation of Indian politics" with BJP as the new national political force. BJP focused on **Cooperative Federalism** as a means of strengthening states. The centralised Planning Commission was replaced by the NITI Aayog in which the Union government assured "active involvement of the states in the spirit of "co-operative" federalism." Later, the Goods and Services Tax (GST) by which the Centre and states would "become equal fiscal partners in sharing a common indirect tax base" was implemented. A GST Council was formed to create a consensus amongst the states regarding the decision. The Union government accepted the 14th Finance Commission recommendation to give the states 42-percent share of the funds from the central pool (from the previous 32 percent). However, how far NITI Aayog and the devolution of increased funds have a bearing on deepening of federalism cannot be seen in terms of results and the effectiveness is still under doubt.

The non-BJP states have expressed concerns regarding the Union government's intervention in state administration by direct monitoring and political appropriating through Centrally Sponsored Schemes. Policies like demonetisation, abrogation of Article 370, and changing the political status of Kashmir and the passing of Citizenship Amendment Act (CAA) 2019 have faced resistance from the regional parties, but their number is few. The trend where the regional actors are largely rallying behind the nationalist policy decisions of the central government marks the beginning of '**national federalism. The history of federalism in India has led to belief that the concept of federalism In India is a paradox.**

Regionalism

Regionalism basically implies an inculcation of a strong sense of love and respect for one's region, ethnicity, language, and culture for which one is ready to fight for greater autonomy within the nation and directly putting the authenticity of Indian federalism in danger. Regionalism started with the creation of the state of Andhra Pradesh after the demand of Potti Sriramulu in 1953 who fasted for 52 days, demanding a separate

state for Telegu speaking people. In 2014, the state of Telangana was declared as the 29th state of the Indian Union. The latest protests for Gorkhland and Bodoland have been revived. Regionalism demands for autonomy on the grounds of language when not fulfilled, it disrupts the political and cultural environment of the nation as a whole and upheavals the basic notion of Indian federation.

Fiscal Federalism

During liberalisation, various economic reforms facilitated the dismantling of the ill-famed **'license, permit and quota raj'** in India. The open market economy deregulated the economic interactions which were earlier strongly controlled by the Union government. After liberalisation, state governments got relative autonomy to initiate business endeavours and bring in foreign investments to their respective states. This gave state chief ministers a political opportunity to project themselves as 'drivers of growth and development'. The Introduction of GST and increase in financial devolution to 42% is a step towards greater federalism.

Judicial Safeguard towards Quasi Federalism

The Supreme Court in the S.R. Bommai vs Union of India case gave a landmark judgment that deepened the federal design of Indian politics. The judgement created immunity for the state governments against the arbitrary use of Article 356 by the Union government. However, there was considerable resistance from the Central Government.

In the recent times, with the dominance of BJP, the prominence of the **'politics of co-option'** of the regional parties by the BJP, a new pattern of 'national federalism' appears to be shaping the Indian political discourse. However, the federalism may be **'cooperative', 'accommodative', or 'coercive'**.

Cooperative Federalism: India to ensure Cooperative Federalism, needs to maintain a proper balance between the six pillars of federalism: autonomy of states, national integration, centralisation, decentralisation, nationalisation, and regionalisation. Extreme political centralisation or chaotic political decentralisation can lead to the weakening of Indian federalism. The right balance would prevent the Union government from repressing state autonomy beyond a point, while guarding the states against divergence that can begin to threaten national unity. Federalism needs to provide for national unity and regional autonomy at the same time. However, as Indian political discourse is largely being shaped by the onset of dominance of BJP, how far such a balanced approach in the federal dynamic will be politically feasible, needs to be examined.

Few steps that can be taken to deepen Federalism in India: The contentious role of the governor in suppressing the states for the Centre's interest needs to be reviewed, proper utilisation of the institutional mechanism of the Inter-state Council must be ensured to develop political goodwill between the Centre and the states on contentious policy issues, the gradual widening of the fiscal capacity of the states has to be legally guaranteed without reducing the Centre's share, adequate electoral reforms for creating a level playing field for the regional political parties and regional leaders would facilitate more competitive political contest between the national and regional political forces, the third level of Indian federalism i.e. the local self-governments, must be politically empowered. The recommendations given by the Punchhi Commission in 2010 are to be implemented by giving a clear division of labour, functions, responsibilities and regulatory role of various levels of governments. Also, there is need to re-look and redistribute entries in the Seventh Schedule. The **'principle of subsidiarity'** can be used as a relevant guiding principle This approach could be the most optimal. The recommendations of Sarkaria Commission, wherein, the Union government must consult the states before legislating on items in the concurrent list must be implemented.

Conclusion :

In moments of crisis, it is useful to sometimes visit the wisdom of the past. Some 2,300 years ago, Chanakya wrote this insightful nugget, strangely relevant to our current dilemma. “The root of wealth is economic activity and lack of it brings material distress. In the absence of fruitful activity, both current prosperity and future growth are in danger of destruction. In the interests of the prosperity of the country, a king should be diligent in foreseeing the possibility of calamities, try and overcome those which happen, remove all obstructions to economic activity and prevent loss of revenue to the state. A king with a depleted treasury eats into the very vitality of the citizens and the country.” **Federalism along with fiscal federalism is designed to protect and articulate plural quality of the society as well to secure both regional autonomy and national unity.**

Federalism with time needs to change. Initially the constitution provided for a strong centre, as there were secessionist tendencies during the time of partition, but now as the nation is developing there is a need for functional, periodic review and subsequent reform of the process of federalization. Institutional and structural mechanisms needed to be reassessed, so that any accumulated stress within the political system does not explode into ugly and violent situations or disturb the functioning of public affairs. Deepening federalism for a reasonable and stable political democracy is the need of the hour. As despite all their tussles, the Union government and the states have a mutual need for survival and Federalism in India cannot just be a paradoxical phenomenon.

SECTION – B

Q.1) Social media – balancing freedom and responsibility.

सोशल मीडिया – स्वतंत्रता और जिम्मेदारी का संतुलन।

ANECDOTE-

CYBER BULLYING -A 20-year-old Indian girl IN UAE, upset over comments mocking her picture on social media planned to commit suicide and live stream it, but was saved in time by the police. Police officials said that the girl, who was not named, was in severe depression due to being trolled and cyberbullied on social media that drove her on the brink of suicide.

The Sharjah Police swung into action to save the girl. It managed to identify the source and location from where the message was sent. The police officers and patrols department reached the girl's flat in Sharjah's Al Nahda area. They told the girl's father about her plans to kill herself.

When they entered the girl's room, she was apparently preparing herself to end her life, the report said. The police said they calmed her down and told her they were there to help her.

The girl was later provided psychological support and counselling to banish the thought of suicide.

INTRODUCTION-

Social media are interactive computer-mediated technologies that facilitate the creation or sharing of information, ideas, career interests, and other forms of expression via virtual communities and networks. The variety of stand-alone and built-in social media services currently available introduces challenges of definition; however, there are some common features.

1. Social media are interactive Web 2.0 Internet-based applications.
2. User-generated content such as text posts or comments, digital photos or videos, and data generated through all online interactions, is the lifeblood of social media.
3. Users create service-specific profiles for the website or app that are designed and maintained by the social media organization.
4. Social media facilitate the development of online social networks by connecting a user's profile with those of other individuals or groups.

Social media outlets differ from traditional media (e.g., magazines, newspapers, TV broadcasting, and radio broadcasting) in many ways, including quality, reach, frequency, usability, immediacy, and permanence. Additionally, social media outlets operate in a dialogic transmission system (many sources to many receivers) while traditional media outlets operate under a mono-logic transmission model (one source to many receivers). For example, a newspaper is delivered to many subscribers and a radio station broadcasts the same programs to an entire city.

According to Statista, in 2020, it is estimated that there are around 3.6 billion people using social media around the globe, up from 3.4 billion in 2019. The number is expected to increase to 4.41 billion in 2025. With the ease of internet access, the number of social media users in India stood at 326.1 million in 2018. This increase is relatively lower as compared to the growth that occurred between 2016 and 2017. Nevertheless, the social network users in the country were expected to be almost 448 million in 2023. Facebook remained the popular choice among the social media platforms.

SOCIAL MEDIA AND ITS ADVANTAGES

- Rapid news sharing.
- Awareness
- Way to help others Read- example -Baba ka dhabha in Delhi customers increased because of SOCIAL Media.
- STAYING CONNECTED
- Endless education opportunities
- Getting advice and help online
- Fighting crime
- Online promotions
- In Pandemic like Covid19 social media helped us staying together.

SOCIAL MEDIA AND & IRRESPONSIBLE BEHAVIOUR by Netizens

At Individual Level-

- **Negative interpersonal interactions and effects:**

- **Cyberbullying**

Social media use sometimes involves negative interactions between users. Angry or emotional conversations can lead to real-world interactions outside of the Internet, which can get users into dangerous situations. Some users have experienced threats of violence online and have feared these threats manifesting themselves offline. Related issues include cyberbullying, online harassment, and "trolling".

- **Stalking**

- **Voyeurism**

- **Insulting the Modesty of a Woman**

- **Criminal intimidation by anonymous communication**

- **Defamation**

- **Sexual Harassment**

- **Publishing Sexually Offensive Material on the Internet**

- **Social comparison and effects**

One phenomenon that is commonly studied with social media is the issue of social comparison. People compare their own lives to the lives of their friends through their friends' posts. Because people are motivated to portray themselves in a way that is appropriate to the situation and serves their best interests often the things posted online are the positive aspects of people's lives, making other people question why their own lives are not as exciting or fulfilling.

Studies have shown that self-comparison on social media can have dire effects on physical and mental health because they give us the ability to seek approval and compare ourselves.

Social impacts-

- **Digital divide**

The digital divide is a measure of disparity in the level of access to technology between households, socioeconomic levels or other demographic categories. Within a modern information society, some individuals produce Internet content while others only consume it, which could be a result of disparities in the education system where only some teachers integrate technology into the classroom and teach critical thinking.

Neil Postman also contends that social media will increase information disparity between "winners" – who are able to use social media actively – and "losers" – who are not familiar with modern technologies or who do not have access to them. People with high social media skills may have better access to information about job opportunities, potential new friends, and social activities in their area, which may enable them to improve their standard of living and their quality of life.

- **Political polarization**

We are seeing increasing consumption of news from social media. Because of algorithms on social media which filter and display news content which are likely to match their users' political preferences, a potential impact of receiving news from social media includes an increase in political polarization due to selective exposure. Political polarization refers to when an individual's stance on a topic is more likely to be strictly defined by their identification with a specific political party or ideology than on other factors. Selective exposure occurs when an individual favors information that supports their beliefs and avoids information that conflicts with their beliefs. A study by Hayat and Samuel-Azran conducted during the 2016 U.S. presidential election observed an "echo chamber" effect of selective exposure among 27,811 Twitter users following the content of cable news shows. The Twitter users observed in the study were found to have little interaction with users and content whose beliefs were different from their own, possibly heightening polarization effects.

Efforts to combat selective exposure in social media may also cause an increase in political polarization.

- **Stereotyping-**

Recent research has demonstrated that social media, and media in general, have the power to increase the scope of stereotypes not only in children but people of all ages. Users of Facebook generally use their profiles to reflect that they are a "normal" person. Social media was found to uphold gender stereotypes both feminine and masculine.

- **Disparity of information available.**
- **Issues with Trustworthiness and reliability of information presented, the impact of social media use on an individual's concentration, ownership of media content.**
- **There has been a dramatic decrease in face-to-face interactions as more and more social media platforms have been introduced with the threat of cyber-bullying and online sexual predators being more prevalent.**
- **Social media may expose children to images of alcohol, tobacco, and sexual behaviors.**
- **Twitter is increasingly a target of heavy activity of marketers. Their actions focused on gaining massive numbers of followers, include use of advanced scripts and manipulation techniques that distort the prime idea of social media by abusing human trustfulness.**

British-American entrepreneur and author Andrew Keen criticizes social media in his book The Cult of the Amateur, writing, "Out of this anarchy, it suddenly became clear that what was governing the infinite monkeys now inputting away on the Internet was the law of digital Darwinism, the survival of the loudest and most opinionated. Under these rules, the only way to intellectually prevail is by infinite filibustering.

- **Criticism of data harvesting and data mining:**

Social media mining

Social media "mining" is a type of data mining, a technique of analysing data to detect patterns. Social media mining is a process of representing, analysing, and extracting actionable patterns from data collected from

people's activities on social media. Google mines data in many ways including using an algorithm in Gmail to analyse information in emails. This use of the information will then affect the type of advertisements shown to the user when they use Gmail. Massive amount of data from social platforms allows **scientists and machine learning researchers to extract insights and build product features.**

- Ethical questions of the extent to which a company should be able to utilize a user's information have been called "big data". Users tend to click through Terms of Use agreements when signing up on social media platforms, and they do not know how their information will be used by companies. This leads to questions of privacy and surveillance when user data is recorded. Some social media outlets have added capture time and Geotagging that helps provide information about the context of the data as well as making their data more accurate.

On April 10, 2018, in a hearing held in response to revelations of data harvesting by Cambridge Analytica, Mark Zuckerberg, the Facebook chief executive, faced questions from senators on a variety of issues, from privacy to the company's business model and the company's mishandling of data. This was Mr. Zuckerberg's first appearance before Congress, prompted by the revelation that Cambridge Analytica, a political consulting firm linked to the Trump campaign, harvested the data of an estimated 87 million Facebook users to psychologically profile voters during the 2016 election. Zuckerberg was pressed to account for how third-party partners could take data without users' knowledge. Lawmakers grilled the 33-year-old executive on the proliferation of so-called fake news on Facebook, Russian interference during the 2016 presidential election and censorship of conservative media.

- **Ownership of content**

Social media content is generated through social media interactions done by users through the site. There has always been a huge debate on the ownership of the content on social media platforms because it is generated by the users and hosted by the company. Added to this is the danger to the security of information, which can be leaked to third parties with economic interests in the platform, or parasites who comb the data for their own databases.

- **Privacy**

Privacy rights advocates warn users on social media about the collection of their personal data. Some information is captured without the user's knowledge or consent through electronic tracking and third party applications. Data may also be collected for law enforcement and governmental purposes, by social media intelligence using data mining techniques. Data and information may also be collected for third party use. When information is shared on social media, that information is no longer private. There have been many cases in which young persons especially, share personal information, which can attract predators. Teens especially share significantly more information on the internet now than they have in the past. Teens are much more likely to share their personal information, such as email address, phone number, and school names. Studies suggest that teens are not aware of what they are posting and how much of that information can be accessed by third parties.

- **Criticism of commercialization**

The commercial development of social media has been criticized as the actions of consumers in these settings have become increasingly value-creating, for example when consumers contribute to the marketing and branding of specific products by posting positive reviews. As such, value-creating activities also increase the value of a specific product, which could, according to the marketing professors Bernard Cova and Daniele Dalli, lead to what they refer to as "double exploitation". Companies are getting consumers to create content for the companies' websites for which the consumers are not paid.

- **Debate over addiction**

As one of the biggest preoccupations among adolescents is social media usage, researchers have begun using the term "F.A.D.", or "Facebook addiction disorder", a form of internet addiction disorder. FAD is characterized by compulsive use of the social networking site Facebook, which generally results in physical or psychological complications.. One German study, published in 2017, investigated a correlation between extensive use of the social networking site and narcissism; the results were published in the journal PLoS One. According to the findings: "FAD was significantly positively related to the personality trait narcissism and to negative mental health variables (depression, anxiety, and stress symptoms)." While these issues regarding social media addiction are continuous and increasing, there are ways to help reduce and curb one's social media obsessions

- **Censorship by governments-**

Banner in Bangkok, observed on June 30, 2014, informing the Thai public that 'like' or 'share' activity on social media may land them in jail

Social media often features in political struggles to control public perception and online activity. In some countries, Internet police or secret police monitor or control citizens' use of social media. For example, in 2013 some social media was banned in Turkey after the Taksim Gezi Park protests. Both Twitter and YouTube were temporarily suspended in the country by a court's decision. On 27 July 2020, in Egypt, two women were sentenced to two years of imprisonment for posting TikTok videos, which the government claims are "violating family values".

- **Deplatforming**

Deplatforming is a form of Internet censorship in which controversial speakers or speech are suspended, banned, or otherwise shut down by social media platforms and other service providers that normally provide a venue for free expression. These kinds of actions are similar to alternative dispute resolution. As early as 2015, platforms such as Reddit began to enforce selective bans based, for example, on terms of service that prohibit "hate speech"

Law professor Glenn Reynolds dubbed 2018 the "Year of Deplatforming", in an August 2018 article in The Wall Street Journal.¹ According to Reynolds, in 2018 "the internet giants decided to slam the gates on a number of people and ideas they don't like. If you rely on someone else's platform to express unpopular ideas, especially ideas on the right, you're now at risk." Most people see social media platforms as censoring objectionable political views.

SOCIAL MEDIA AND INDIAN CONTEXT-

Our Constitution has defined free speech and its limits in Article 19(2). The principle that all platforms must abide by, therefore, is simple: any content or speech on a platform should pass the test of Article 19(2), and that alone. The take-down policies, guidelines and algorithms of all social media platforms should be compliant with and not go beyond what is prescribed by law. This standard should be equitably applied to all, as per Article 14. As a ground rule that all platforms must comply with, this is simple enough to set down in law.

We need a new legislative framework of the tech and internet sectors. There are too many laws and too many gaps. The legislative and institutional framework must be flexible, dynamic and evolutionary, unlike what exists presently. We should update laws like the **Telegraph Act**, **TRAI Act**, **IT Act**, **Indian Penal Code** (to deal with issues of defamation, etc) and the IT intermediary guidelines of the proposed Data Protection Act.

It may be better to either expand the mandate of an existing institution like the Telecom Regulatory Authority of India (TRAI) or Competition Commission of India, or merge bodies like the Telecom Dispute Settlement and Appellate Tribunal and Cyber-Appellate Tribunal into one (to curb the rising burden on the Judiciary)

We need Strong data protection regime as after Privacy Judgement of SC.

SOLUTION FOR BRINGING RESPONSIBILITY AMONG DIFFERENT STAKE HOLDERS IN SOCIAL MEDIA-

- **Strengthening Legislative Frameworks by respective governments with the vision of Free and OPEN Internet.**
- **CREATING AWARENESS AMONG THE SOCIAL MEDIA USERS.**
- **Corporate responsibility.**

Facebook, for instance, has started to address this matter by publishing **'transparency reports'** and setting up an **'oversight board'**.

We have no way of knowing the **extent of biases** that may be inherent inside each firm.

The fact that their main algorithms target advertising and **hyper-personalisation of content** makes them further suspect as arbiters of balanced news.

This means that those who use social media platforms must pull in another direction to maintain access to a range of sources and views.

- Google Tax as these companies causing great revenue loss to Developing countries.
- Independent Regulator for Cross border flow of data.
- Global cooperation for better internet governance.
- Capacity Building.

Conclusion-

SOCIAL MEDIA is great space; it can bring Social Revolution like Arab Spring; it can be bulwark of Freedom of Speech and Expression. However, it can also degenerate into Echo Chamber and Place of Online Trolling. There is need to reform it to bring Social Responsibility.

India will soon be one of the world's biggest internet-enabled nations, with over 800 million online users. Looking beyond Covid, India could emerge as a leading economic power. Technology will likely be a big part of our economy, accounting for almost a fifth of our overall output. Hence, the need to harness the good aspects of it and regulate the bad. This is critical to our national strategy for growth.

Unregulated social and digital media could pose a threat to India's rise as a trustworthy and responsible nation, as also Indian democracy, the world's largest. These challenges can be addressed by regulating social media efficiently and modernizing our laws and institutions. The time for action has come.

Q.2) India's problem : poverty or inequality?**भारत की समस्या : गरीबी या असमानता?****Quotes:**

“Extreme poverty anywhere is a threat to human security everywhere.” – Kofi Annan, Seventh Secretary-General of the United Nations

“Poverty is the parent of revolution and crime.” – Aristotle, Greek philosopher

“Poverty is the worst form of violence.” – Mahatma Gandhi, Indian political and spiritual leader

“Poverty is like punishment for a crime you didn't commit.” – Eli Khamarov, writer

“In a country well governed, poverty is something to be ashamed of. In a country badly governed, wealth is something to be ashamed of.” – Confucius, Chinese teacher and philosopher

“An imbalance between rich and poor is the oldest and most fatal ailment of all republics.” – Plutarch, Greek historian

“The opposite of poverty is not wealth; the opposite of poverty is enough.” – Dr. Wess Stafford, President Emeritus of Compassion International

Poverty is not just lack of money; it is not having the capability to realize ones full potential of a human being. : Amartya Sen

“Poverty does not belong in civilized human society. Its proper place is in a museum.” – Muhammad Yunus, entrepreneur

I believe that virtually all the problems in the world come from inequality of one kind or another. : Amartya Sen

I raise up my voice; not so I can shout, but so that those without voices can be heard.. We cannot succeed when half of us are held back. : Malala Yousafzai.

Building capacity dissolves differences. It irons out inequalities: APJ Abdul Kalam.

If socio economic inequality continues to grow in this proportion, then the benefits of the youth population, which considered a boon for India, can turn into curse. : Arvind K

Inequality is the root of social evil: Pope Francis.

The worst form of inequality is to try make unequal things equal. : Aristotle.

A nation will not survive morally or economically, when so few have so much, while so many have so little. : Bernie Sanders.

As long as poverty, injustice and gross inequality persists in our world, none of us can truly rest. : Nelson Mandela.

Inequality hardens society into class system. Inequality divides us from one another. Inequality undermines democracy. : George Packer.

Case Study:

Amudha: Amudha is a 14-year-old student in 10th grade at a school in a small rural community near Madurai. She lives with her father, mother, sister, nephew and niece. Her father's hand was broken while picking coconuts. This stopped him from working as a manual labourer. While he was recovering, he worked as a watchman and her mother became a construction worker. Both parents now work in construction. Her father earns Rs 400 per day and her mother earns Rs 350 and has severe knee and back pain due to the strenuous work. Amudha' parents cook with wood, unable to afford a liquid petroleum gas (LPG) cylinder. The family live in a rented primitive shack next to a dried-up pond on wasteland owned by the local government. They have no drinking water or toilet facilities. They defecate in the open next to the pond. They obtain electricity from a neighbour's supply. The meagre wages are not sufficient to maintain a

family of six. Amudha's mother dreams of hut of their own before she dies. Amudha's elder sister was married at the age of 16 years but her mother wants Amudha to study more so that she can get a good job and salary to support the family. Amudha's day starts at 6:00am. She helps her mother at home and then walks to school. Her Government provided bicycle is broken and there is no money to repair it. The Prisoners of Hope Trust sponsors her education. After school, she attends remedial classes until 9:00pm. She then comes home for dinner. Later she helps her mother wash dishes and goes to sleep by 10:00pm. Amudha's ambition is to become a doctor. Her mother lost two babies, giving birth at home with no access to medical care. Amudha wants to help rural women like her mother. She works hard to achieve this goal.

Kari: Kari is a 45-year-old woman who lives in her birthplace village in Bihar, India. She was married to her husband when she was 13, and they have a son and three daughters. The family is Hindu and belongs to the Musahar caste. During certain seasons, Kari finds agricultural employment related to the crop cycle, often walking 15 kilometers to work. Over time, her left hand has become partially paralyzed. Nonetheless, she strives to work as much as she can. She sows seeds and is occasionally employed by farmers in weeding, for which she is paid INR 25 a day – much less than the prevailing wage due to her disability. During harvesting, she gathers the paddy and wheat crops. Being seasonal, harvesting work barely lasts for more than four weeks per year. She is paid in kind and can keep one-ninth of the produce that she helps to harvest. Overall, Kari works for less than two months annually, with no guarantee of daily employment. Her husband works half the year in Punjab, and their children have left home. Although proud of their children, Kari and her husband regret being unable to educate any of them due to needing “all hands on board”.

Short Poem: on **Inequality**, Shannon Perry

Females and Males are one in the world,

Although that is not the belief that has been furred.

We are told that one gender is better than the other,

It seems it's just one stereotype after another.

Introduction:

Addressing the Loksabha on the 75th anniversary of the Quit India Movement (2017), by 2022, when India will celebrate its 75th Independence Day, the PM called for Poverty Free India. Additionally, resolving COVID 19 crisis, the government said, 800 million poor Indians would be given free ration. Poverty is one of the many social problems that are detrimental to Indian Society. That is Injustice.

Poverty denotes a state in which life lacks necessities. Life survival is necessity, and bad is the man who does not have the means to save it. NITI Aayog performs an assessment of deprivation in India based on consumption expenditure.

Poverty has been described as a "pronounced poverty in well-being" condition and being poor as being hungry, lacking shelter and clothes, being sick and not being cared for, being illiterate and not being taught. Poor people are more vulnerable to out of control adverse events. They are also handled poorly by state and social institutions and in those institutions are excluded from the voice and influence. Many of these poor people live in the countryside and have odd jobs to keep afloat. The lack of jobs in rural areas that provides a living wage pushes many Indians into fast-growing metropolitan areas like Mumbai, Delhi, Bangalore or Calcutta. Millions of households in India are passing deprivation to the next generation, rendering eradication of poverty almost impossible. Some parts of society have traditionally remained small, making us wonder poverty has become inherited.

Inequalities are deeper in human development. They are difficult, rather than hardship. A lot of people have no chance of a better future in India. They watch from the sidelines of society, without desire, meaning or integrity, as they see others move forward to ever greater prosperity. Some have fled extreme poverty, but

others still do not have the ability or opportunities to manage their lives. Sex, ethnicity or the wealth of parents all too much still dictates the position an individual holds in society. Inequalities around employment, wellness, and resources can be seen. In India, inequalities in wealth, labor participation, and leadership positions can also be witnessed. This also bears witness to socioeconomic injustice. In the digital revolution, too, inequality can be observed.

Inequalities and injustice are evidence everywhere. There is the anxiety. Poverty and human development gaps are harming communities, undermining social stability and people's confidence in government, institutions and one another. Many harmed societies, wiping out people from reaching their full potential at work and in life. We also make it harder for political decisions to represent the desires of society as a whole and protect the world, as today's few moving forward flex their power to form decisions solely for their own interests. People will take the streets to the full.

Such human development issues are a roadblock to achieving the Sustainable Development Agenda 2030. They're not all about income and wealth inequalities. They cannot be accounted for simply by using summary inequality measures which concentrate on a single dimension. And they'll shape the opportunities for people living to see the 22nd century.

Perhaps particularly, the precise data on bad and widespread inequality should be collected. Governments must evaluate their schemes objectively, and deduce a strategy to combat it. India not only faces poverty, but also faces a beast of Inequality. We need multi-pronged approach to resolve both of the problems.

Incidence of Poverty: Each time we open the newspaper, or turn to a news channel, apart from the growing crime rate, there's one more thing that's popular to all, deprivation. No matter where one looks, the politically depraved cannot be turned a blind eye. Poverty is what unites us, with culture, class, caste, color and so many other things dividing us. Late Shri Arun Jaitley, then Indian Finance Minister, said in an interview with The Economic Times on 11 January 2019, "Poverty is a secular criterion, and it cuts through cultures and religions."

Hegel once said: Poverty is a social phenomenon. Indigenous poverty has two facets: one social and the other socio-economic. Many that are economically poor are typically financially and educationally disadvantaged. In India deprivation is counted in absolute terms. Many economists, including Prof. Amartya Sen, and Jean Dreze, Suresh Tendulkar, N.C. Saxena, have highlighted the incidence of poverty. Tendulkar poverty line continues to be India's reference point. It set Rs. 27.2 daily spending in rural areas, and Rs. 33.3 in urban areas.

There may be various causes of poverty, such as: pandemic (COVID 19), population growth, low agricultural productivity, inefficient use of energy, low rate of economic development, price increase, unemployment, lack of capital and entrepreneurship, social factors, colonial exploitation and climate factors, to mention but a few.

India is home to over 270 million people living in poverty. One in five Indians are poor. The 7 low-income states are home to 62 percent of poor Indians, and low-income states are home to just 45 percent of the Indians. Compared to 80 per cent of poor Indians live in rural areas. Uttar Pradesh has a low population of 60 million.

Poverty has significant impacts on health, employment and standards of living. These regions are affected largely because of the prevalence of deprivation.

Poverty rate is higher in rural areas than in urban areas. In rural areas poverty rate is 25% whereas in urban areas poverty rate is 14%. Small villages account for 27% poor population, 19% poor in Big villages (5000 plus population), 17% poor in small town (less than 1 million) and mere 6% poor in big cities.

Incidence of poverty is also high in marginalized sections of the society. Scheduled tribes account for 43% of poor population, whereas Scheduled Castes account for 29% poor population. 21% poor belong to OBCs

while mere 12% belong to others. Only 28% of India's population is SC and STs, whereas they account for over 43% of India's poor population.

Casual labor is the main source of income for rural poor, with nearly 50% of the rural poor employed in casual labor. Self-employment and casual labor is the main source of income for urban poor, 40% and 34% respectively.

Poor population spends more on food, fuel and light as compared to non-poor population in India. Poor person spends 56% on food, 13% on fuel and light. Whereas, Non Poor spends 47% on food and 9% on fuel and light. Poor also owns lesser number of assets. Only 61% poor owns mobile phone, while 90% urban owns a mobile phone. 30% poor owns a TV, whereas 65% of non-poor owns a TV. 27% Poor population had stove, while 61% of non-poor had. 5% poor owned a two wheeler, whereas 30% of non-poor owned. 2% of poor owned a refrigerator, while 24% of non-poor owned it. 0% of poor owns, washing machine PC/Laptop, or a four wheeler, non-poor owns 11%, 7% and 5% respectively.

Poverty impacts education too, with 45% poor population remains illiterate, 25% is literate or primary, 15% is middle schooled and mere 15% is secondary or above. This is in stark contrast with mere 26% illiterate amongst non-poor, 20% primary, 17% middle and 37% secondary and above.

In rural areas, nearly 90% of poor are landless and marginal land owners. Whereas 80% of non-poor are marginal land owners and landless.

Before SBM (Swachh Bharat Mission), Access to toilets were also stark. Only 21% of poor had access to latrines whereas non poor had 62% access. Only 61% poor population had access to electricity, whereas over 85% of non-poor had access to electricity. Meager 6% poor has access to tap water, whereas 33% non-poor had.

Millions of households in India are passing deprivation to the next generation. Countries 200 poorest region, now known as aspirational districts, have benefited from an ambitious program to eliminate poverty since 1951, when the first five-year plan was developed. For an average of 150 plus development programs running in each district, these districts have since become the subject of all development plans in India. And the rate of deprivation in these districts indicates the prevalence of chronic deprivation in the districts in question.

Inequality issue demands greater attention as pure elevation from poverty won't provide them with a decent standard of living. We must look at status of inequality present in India in depth to understand the challenges associated with it.

Inequality in India: India is a rapidly changing economy. Since 2005 its average national per capita income has more than doubled. Multidimensional poverty has been developing dramatically due to a combination of strong economic growth and social policies. Between 2005 and 2015 India's number of multidimensionally poor people dropped by over 271 million. On average improvement among the poorest states and the poorest groups has been more rapid. Despite progress on indices of human growth, horizontal inequalities exist, and their dynamics follow the same trend as in the sense of human development's vertical inequalities: major differences, fundamental convergence, and enhanced capacity divergence.

Scheduled Castes, Scheduled Tribes and Backward Classes and Women underperform the rest of society across human development indicators, including education attainment and access to digital technologies. These groups have suffered from stigma and exclusion for centuries. Population with 5 or more years of education, 2015: ST (70% Male, 50% female), SC (78.7% Male, 60.7% Female), OBCs (83.1% Male, 66.3% Female) and others (87.1% Male, 77.9% Female). In case of Population with 12 or more years of education,

2015: ST (17.5% Male, 10.6% female), SC (23.2% Male, 15.7% Female), OBCs (29.4% Male, 21.2% Female) and Others (38.7% Male, 30.4% Female).

Modern India has sought to address the inequalities legally by affirmative action, social discrimination and policies of reservation for such classes. There has been a reduction in inequality in key human development areas since 2005/06. For example, there is a convergence in educational attainment, with traditionally disadvantaged groups in the proportion of people with five or more years of schooling catching up with the rest of the population. Likewise there is convergence in cell phone connectivity and adoption. Change in population with 5 or more years of education between 2005 and 2015: ST (18% Male, 20.6% female), SC (13.3% Male, 20% Female), OBCs (10.4% Male, 17.8% Female) and Others (7.3% Male, 11.3% Female). This data indicates marginalized sections have improved more than other sections. Households with access to Mobile ST (77.6%), SC(87.8), OBCs (92.0) and Others (94.7). Households with access to Mobile, change between 2005 and 2015: ST(72.6%), SC(79.1), OBCs (77.4) and Others (66.2).

Even in improved areas of human growth, such as access to technology and 12 or more years of schooling, there has been an rise in inequalities: classes that were more competitive in 2005/2006 have made the most strides, and disadvantaged groups are moving ahead even, given success, are lagging further behind in comparative terms.

Change in population with 12 or more years of education between 2005 and 2015: ST (8.8% Male, 6.7% female), SC (9.8% Male, 9.4% Female), OBCs (10.8% Male, 11.4% Female) and others (11.1% Male, 10.5% Female). Households with access to computers ST (3.0%), SC (4.8%), OBCs (8.0%) and others (16.7%). Similarly, change in computer access between 2005 and 2015: ST (2.3%), SC (4.0%), OBCs (6.0%) and others (10.2%).

Wealth inequality based on the income share of the top 10 per cent has risen in most regions since 1980, but at different levels. The top 10 per cent won an estimated 55 per cent of sales. In India, the bottom 40 per cent sales growth—58 per cent between 2000 and 2018—was significantly below average. The richest 1 per cent at the other end of the continuum saw their salaries rise slightly faster than the average since 2000 and since 2007. The top 1% share of national income rose from 5% in the 1980s to 22% in 2018 (based on the World Inequality Database). In India, the average rate of income growth was 122 per cent between 2000 and 2018. The bottom 40% growth rate was 58%, while the highest 1% growth rate was 213%. Latest OXFAM study estimated that the top 1 per cent own more than four times the wealth owned by 953 million (70 percent of the population). The cumulative income of 63 Indian billionaires for fiscal year 2018:2019 is higher than the total Union Budget. It would take 22,277 years for a female domestic worker to earn what a technology company's top CEO earns in one year. A tech CEO will make more in 10 minutes than a domestic worker would do in a year with earnings estimated at Rs. 106 per second. A minimum wage earner in rural India will take 940 years to earn what a top-paying executive earns in a year.

The measures of multidimensional gender social norms tend to be related to discrimination between the sexes.

The net inequality is greater in countries with higher prejudices. The disparity can be calculated by the rate of maternal mortality(174), the proportion of seats in parliament(12%), the population with at least some secondary education (39% female versus 63.5% male), the rate of participation in the labor force (27% female and 73% male). India ranked 108 out of 149 countries according to WEF's newly published gender wage gap index. Women in India earn less than men by 19 per cent. A man's median gross hourly wage is Rs. 243, while it is Rs. 197 for women. Women and girls each and every day put in 3.26 billion hours of unpaid work, a contribution to the Indian economy of at least 19 lakh crore a year, which is 20 times India's education budget in 2019. The situation in India alone isn't bad, the world's top 22 richest men have more money than all African women.

There are over 630 million Internet users in India. India now boasts the world's second-largest Internet user base. India also has the lowest rates for mobile data, which in the last 4 years has encouraged a huge population to use the internet. Data consumption is also growing, in addition to pie size. The average Internet user now consumes more than 10 GB of data per month, which translates into 20 hours of video per month, compared with just 15 minutes in 2015. Yet for every Indian who has internet access, there's at least one who doesn't, it should be a matter of concern. The technological changes which unfold before our eyes will increase inequality. The Industrial Revolution may have set humanity on a path to unparalleled betterment. Yet the Great Divergence opened up, too. Likewise, technological innovation will increase the gap between haves and have-nots. Rural people in India, 66% have an internet density of 25.3%, while 34% of urban population has an internet density of 98%. In the quality of internet connectivity, we also see significant variations in the access rates across the region. Remote mountainous regions of HP, sparsely inhabited Rajasthan deserts, and dense MP forests face greater digital exclusion. So, many of these places are home to tribal and oppressed peoples in India.

Hence poor communication will inadvertently exacerbate established disadvantages. Gender is another important factor, with just 20 per cent of Indian women using mobile and internet services, said a GSMA 2019 survey. Fundamentally the finance landscape is being reshaped, with non-financial tech companies delivering payment services. In India, JAM trinity has revolutionized government to individual, payment. Demonetization was thought to move India towards digital transactions, but the latest RBI study said that circulating currency has increased by 17%. Online transactions rose to 19.5 per cent in volume in 2018/19, but the digital economy has gained traction in metro, city and semi-urban belts to some degree. It has not spread to rural belts or the informal sector where the problem is financial illiteracy.

Impact of prevalent inequality: In places with high income inequality, the relation between the income of parents and their children is higher, i.e., lower mobility of the intergenerational income. This relation is called the Great Gatsby Curve. The greater human development inequality, the greater the generational elasticity of the wage, i.e., the lower the mobility. Inequality limits versatility, as it generates incentives. It increases the income implications of intrinsic disparities between individuals; it also changes resources, rewards, and structures that form, grow, and distribute features and skills valued on the labor market; and it shifts the balance of power such that some groups are able to organize policies or otherwise promote the achievement of their children independently of talent.

Compared to the Great Gatsby Curve, areas with greater disparity in human growth have greater intergenerational continuity in education (a formula that measures the effect on the years of schooling of respondents of one additional year of parenting). This means that education rates in more unequal countries are stickier across generations (that is, there is less relative mobility). Education gaps begin during infancy, when parents are unable to take advantage of the ability to care for themselves. But institutions can play an important part in promoting mobility

Initiatives taken by government plus few suggestions: The Government has taken many measures to relieve the poverty traps of the poor population. Which include the Integrated Rural Development Programme, PM Swarajgar Yojana, Rural Awaas Yojana, Work Food Programme, National Old Age Pension Scheme, Annapurna Scheme, MGNREGA, NRLM, NULM, PMKVY, PMJDY (Jan Dhan Yojana), etc.

These initiatives have borne fruit too. India halved its poverty rate since 1990. Also we have uplifted 270 million people from poverty between 2005 and 2015. For the first time in 2018, Nigeria overtook India in total number of poor population. India is now, not the home to most poor in the world. Poverty estimation in India is carried out by NITI Aayog based on consumption expenditure not on income levels in India. Data of which is collected by NSSO. We want to eliminate prevalent poverty in the country but are truly unaware

of the magnitude of poverty. Some reports suggest Indian rural poverty has shot up, while some reports suggest COVID 19 may double the poverty in India. Also the lack of official data from government increases the chasm between reality and hypothetical finding of numbers of poor. Indian government has proposed a national survey with new matrices to estimate poverty.

Estimates based on administrative tax data in India suggest that the top 1 per cent will have a share of income close to 20 per cent. Yet households record a share of income of about 10 percent, indicating that data from the household survey underestimate income at the top of the distribution. Survey numbers for household data do not represent true picture. To eliminate poverty, India needs to rise at least 8 per cent of GDP growth rate.

Conclusion:

Poverty and injustice are twin evils that, since time immemorial, have plagued Indian society. These are impacting the marginalized parts of society. And fighting them is crucial for governments. Interventions need to understand both how to close the gap in the achievements of basic education and how to stop the persistent – or even increasing – divergence in more advanced education achievements. Poverty has an effect on all aspects of human life whether it is health, education or living standards.

Inequalities are seen in all ways, from the accessibility of different items, it is prevalent across gender too. Inequality requires greater focus as uplifting people from poverty is comparatively easy, but eradicating inequality is difficult.

Economic disparities are to a large degree a decision made by those with the option. Remedying them is a option, too. Technology may help to teach at the right level, for instance in allowing personally tailored content. One example of how technology can help in middle school grades is a technology led instructional programme called Mindspark used in India. It benchmarks each student's initial learning level, and dynamically customizes content to suit the level and rate of progress of the person. Those with exposure to the system scored higher in maths and in Hindi in just 4.5 months. For example, carbon pricing will minimize inequality if the revenue from a carbon tax is returned to taxpayers according to a budget-neutral principle called revenue redistribution. A research in India found that phasing out energy subsidies and restoring government savings to citizens in the form of a universal basic income would be transformative, benefiting dramatically the poor, who usually spend much less on energy than the richest.

Having the richest one percent in the next 10 years to pay only 0.5 percent extra tax on their income would be equal to the investment needed to create 117 million jobs in various sectors. Indian government as one of Digital India's key pillars is pushing for universal access to mobile connectivity. It aims to achieve this by providing broadband connectivity to 250,000 village councils across the country.

What India requires is a systematic exercise guided by data to determine what factors cause the degree of exclusion and the reasons behind it. We can only devise tailored approaches to combat it when we truly grasp the beast of deprivation and injustice. We must see a dream for a more equitable India wherein no one is plagued with poverty and inequality is not seen. Jai Hind.

Q.3) Reinventing Indian Agriculture is the need of the hour.

भारतीय कृषि को नया रूप देना समय की मांग है।

Introduction**#1 Quotation based**

- “If agriculture goes wrong, nothing else will have a chance to go right.”- M S Swaminathan
- “There are two major challenges before Indian agriculture today: ecological and economical. The conservation of our basic agricultural assets such as land, water, and biodiversity is a major challenge. How to make agriculture sustainable is the challenge.”-M S Swaminathan
- “Agriculture is our wisest pursuit, because it will in the end contribute most to real wealth, good morals, and happiness.” -Thomas Jefferson
- “The farmer is the only man in our economy who buys everything at retail, sells everything at wholesale, and pays the freight both ways.” – John F. Kennedy
- “If everything of value and substance is produced in villages, then why rural areas are mired in poverty and urban areas awashed in wealth.”- Leo Tolstoy in his “what then we must do’
- Investments in agriculture are the best weapons against hunger and poverty and they have made life better for billions of people- Bill and Melinda Gates foundation.
- “Women have an important role in agriculture. We need to introduce technology, which will help us harness the potential of women in agriculture. We need to divide the agriculture sector into three parts – regular farming, farming of trees and animal husbandry. If we are able to do this, the contribution of our women will increase even more.”- PM Narendra Modi
- “Without access to modern farming techniques or machinery, let alone science-based climate and weather data, farmer’s livelihoods hinge precariously on a changing environment that they’re struggling to understand.”- US agency for International Development.

#2 Through anecdote/ story

Shri Rajpal Singh of Saharanpur district, Uttar Pradesh has introduced **Peach (fruit) based cropping system** for the first time in the district. It is an alternative to sugarcane dominated cropping system in the district. **Horti -vegetable system** provides cash flow throughout the year as compared to sugarcane based system where farmers get returns after one year. The system is sustainable and there is no problem of marketing. The system adopted by farmer is profitable and is being used as a model for other farmers and extension personnel. Along with the other benefits, it is environment-friendly and provides higher returns. He has proven that reinventing agriculture can prove beneficial for the farmer as well as the environment.

Tirupati based Sandeep Kannan after graduation in 2020, just like his batchmates was thinking to move out of his hometown to Tier-I city to build a career. But later he decided to pursue his family occupation of farming and started reading about **Hydroponics**. The ability to grow nutritious foods in a controlled environment without soil attracted him to this innovative farming method. He started small with the initial cultivation on his terrace and waited three months to get his first harvest. Later he invested to make it a big venture. Though initially he faced issues of investment and marketing but now his hard work has paid off. The business is proving itself to be lucrative with sales and returns increasing exponentially. Such young Agri-entrepreneurs prove that reinventing Indian agriculture through innovative farming methods can be a lucrative venture.

Body Content

Agriculture sector in India is considered to be the backbone of Indian economy. It is the largest employment generating sector of the economy, **employing almost 50% of the India's workforce** and major source of livelihood for India's rural population. The success of **Green Revolution** helped country in becoming food surplus from import dependency of 1960s. There is a rise in yield due to the increased use of high variety seeds, fertilizers, pesticides etc. Total food grain production in the country is estimated to be a record 291.95 million tonnes, according to the second advance estimates for 2019-20. This is news to be happy about, but it is only one side of the story. **As per the estimates of Indian Council for Agricultural Research (ICAR), demand for food grain would increase to 345 million tonnes by 2030.**

Over the years, Agriculture's contribution to India's GDP has fallen from near about 50% at Independence to 17-18 (though it increased to around 20% in recent year). There is continuous fluctuation in agricultural growth rate. After the economic reforms of 1991, public investment on agriculture sector has dropped considerably. There have been numerous cases of farmer suicides due to huge debts and poor agriculture production. The dependence on monsoon along with occasional disasters like floods, flash floods and pest attacks affect the yield considerably.

Indian Agriculture has become non- remunerative, farmer's debt are rising, increasing incidences of farmer suicides are being reported and farmers protests have become a regular feature. According to the **Census 2011, every day 2,000 farmers give up farming**. The 2013 report shown that average monthly income of agricultural household is just about Rs.6400. According to NABARD survey, more than 50% of the farmers are indebted and many of them are still dependent on informal sources like money lenders, traders, family etc. for their loan requirements. They are being charged exorbitant rate of interest and lacks capacity to repay if their crops fail.

According to National Crime Records Bureau (NCRB) report, people in the farm sector accounted for 7.4% of the total suicides in India. The challenge of erratic monsoon and lack of irrigation facilities (around 68% of net sown area in the country is rain fed) put Indian farmers in vulnerable condition. This all shows how the farmers of the country are suffering and if want to protect our agriculture, we have to improve the condition of people, those who are deriving their livelihood from it. The quote **"Once in your life you need a doctor, a lawyer, a policemen and a preacher, but everyday three times a day, you need a farmer"**, shows the significance of farmers and farming. With the emerging threats of climate change, the vulnerability of farmers and agriculture is going to increase.

As the Indian population is increasing, the available land for agriculture is decreasing due to demands of urbanisation. The distribution of agricultural land in India is not fair. There are **nearly 140 million landholdings** in India with an average size of just above 1 ha (1.15 ha). Two-thirds of these holdings are marginal (<1 ha) with an average size of 0.39 ha only (Agricultural Census, 2014).

In order to get more yield from less land, more manures are being added to the fields, due to which its productivity is decreasing with time. On top of it, unsustainable irrigation methods have led to salinisation and alkalinisation problems. Increasing population, increasing average income and globalisation effects in India will increase demand for quantity, quality and nutritious food, and variety of food. Therefore, pressure on decreasing available cultivable land to produce more quantity, variety and quality of food will keep on increasing.

The land tenure system practiced in India is also suffering from a lot of defects. The post-independence land reforms did not yield the desired result. Insecurity of tenancy is a big problem which prohibits farmers to invest in farming and increasing soil fertility. Indian agriculture is continuously subjected to instability

arising out of fluctuations in weather and gamble of monsoon. The rain-fed areas suffer from inadequate or failed crop production due to droughts. As a result, the production of food-grains and other crops fluctuates widely leading to continuous fluctuation of prices of agricultural crops.

To solve all the above mentioned and not mentioned issues associated with Indian agriculture, adoption of innovative methods in the agriculture sector is the need of the hour. **Mahatma Gandhi once said that “To forget how to dig the earth and to tend the soil is to forget ourselves”** which clearly tells about the importance of agriculture, so we need to focus on the solution.

To improve productivity and profitability in a sustainable manner our policy needs to be changed from input intensive to technology intensive; rather skill intensive agriculture. Ex PM Manmohan Singh had said that Indian agriculture is going through a phase of technology fatigue. In recent years the benefits of new technologies have been experienced but still there are major apprehensions about them in the farming community and the government. **Hybrid technologies in maize, vegetables, conservative agriculture, system of rice intensification (SRI), precision farming, farm mechanization, hi-tech cultivation of fruits, vegetables & flowers, primary and secondary processing** introduced in farm produce and many other technologies have already shown that they can deliver the goals of meeting the objectives of higher productivity and profitability. The traditional breeding of crops is now supplemented by new biotechnological innovations like **gene editing, genome rewriting, speed breeding**. The scientists need to be encouraged to do research in modern technology areas.

Indian agriculture requires such reinventions. One such invention is ‘**Smart agriculture**’ which is an initiative to carry out sustainable agriculture through judicious use of improved and updated technology. Precision farming is one such initiative in agriculture using Internet of Things (IoT) and IT. The global market for precision agriculture is expected to grow at an annual growth rate of 13.09% to reach a market size of over US\$ 6.34 billion by 2022, and India is expected to see an annual growth rate of 18.29% during the same period. A recent example of precision agriculture was witnessed in India when farmers from Andhra Pradesh and Karnataka waited to get a text message before they sowed the seeds. The SMS, which was delivered to them in their native language, informed them when to sow their groundnut crops. Farmers from Telangana, Maharashtra and Madhya Pradesh are also receiving automated voice calls to alert them if their cotton crops are at risk of a pest attack, based on the weather conditions and crop stage

One of the other innovative systems is **Farm Management Information System (FMIS)** which provides various information at a given period instantly which includes data on soil sample, weather conditions, sensor data, maps, etc. It helps in taking right farming decisions at an appropriate time. **Geographical Information System** can be used to examine and analyse the wider range of agricultural-related resources which are important parameters of crop productivity. On the same lines **Nanotechnology** has prospects for integrated pest and nutrient management involving processes for pest disease control, efficient fertiliser applications with minimised nutrient loss

Application of Artificial Intelligence in agriculture helps in capturing images and identifying pests and plant diseases for better agricultural administration at field level. Machine Learning algorithms provide for digital mapping of crop health and ground level moisture. IoT for Agriculture has built in mechanism for monitoring crop fields with the help of sensors (light, humidity, temperature, soil moisture, etc.) and automating the agriculture practices. While LED Lighting ensures a precise control of photoperiod, soil, and environmental sensors, drones can perform several significant tasks like application of fertiliser, pesticides, crop monitoring, crop estimation and damage assessments, etc.

Soil scientist Rattan Lal's Law of Marginality states, "**Marginal soils cultivated with marginal inputs produce marginal yields and support marginal living**". What this means is that poor soil needs some inputs, especially as we lose old practices of annual soil flooding and replenishing. India should explore semi-organic farming, i.e., immediately losing pesticides, but gradually phasing out chemical fertilisers. In 1996, the Department of Agriculture introduced Organic Farming Project and ran a trial at Lungmuat village in Mizoram. Here, Organic Farming coupled with contour trench farming was trialled with a very promising results.

Vermi-culture was also started by importing good species of earthworm. A good number of villages were covered giving training on Bio-Composing methods. Since the Organic Farming system solely depends on the use of crop residue, animal manures, green manures, off-farm organic wastes to supply organic manures like Neem cake, etc. to the needy farmers to supplement their plant nutrient requirement, crop rotation incorporating legumes and Use of Bio-Fertilizers, Organic manures, biological pest control to maintain soil productivity, the Agriculture Department gradually reduce the import of chemical Agri. inputs such as fertilizers, pesticides, etc. Several awareness Campaign and Training on organic farming were conducted. **Organic farming** has been successfully adopted with the state of Sikkim being the front runner. **Zero Budget Natural Farming** is also an innovative farming practice which focuses on breaking input cost burdens.

With a strong percentage of the working population employed in Agri and allied sectors, policy thrust to establish institutions and strengthen market linkages will go a long way in improving farmer welfare in the country. As setting up of **FPO infrastructure** across the country has gained pace in the recent times and are located closer to the farming communities across the nation thereby, minimizing the problem of access to farming services and products. Agriculture credit, Crop insurance, technology inputs and marketing support can be driven in a collective way from these FPO centres. FPOs in association with tech start-ups can pilot necessary farming interventions and deliver exceptional results and thereby, benefitting the farming community at large. It would be highly imperative if these measures are followed by a robust monitoring framework that can mitigate risks at different levels of the farming ecosystem in India. With recent efforts in expanding agricultural credit, deepened scope of crop insurance and creation of a social security mechanism dedicated to farmers alone, the farming community will be strengthened with policy level measures that may improve their financial wellbeing.

Conclusion

The stakes are high, but as any private enterprise, agriculture too requires government support, private investment, and technological upgradation. We have to identify the deficit, intervene and make India an agricultural powerhouse. We were successful in the 1960s, so today with globalisation, strong economic and political power we can easily re-invent Indian agriculture.

If the problems related to agriculture are more, then we need to do reinventing in agriculture as soon as possible. Agriculture has had its own importance, whether it is in the beginning of civilization or in the present or in the future. The importance of agriculture is very high in every cycle of time, but if we want to take advantage of it for a long time, then we have to pay attention to sustainable agriculture, as well as try to overcome all the problems related to it, so that every person to get enough food and we can move forward on the path of development as M. S. Swaminathan once said that "**If agriculture goes wrong, nothing else will have a chance to go right in the country.**"

Section – C

Q.1) 30 years of LPG reforms.

LPG सुधार के 30 साल।

Introduction:

#1 Quotation based

- “When learning is purposeful, creativity blossoms. When creativity blossoms, thinking emanates. When thinking emanates, knowledge is fully lit. When knowledge is lit, economy flourishes.” - **A.P.J. Abdul Kalam**.
- “There is a need for financial reform along ethical lines that would produce in its turn an economic reform to benefit everyone. This would nevertheless require a courageous change of attitude on the part of political leaders.” - **Pope Francis**
- “Without the concern for social welfare, economic growth is inhumanly proportional to economic disparity.” - **Abhijit Naskar, in Martyr Meets World: To Solve The Hard Problem of Inhumanity**
- “Our vision is not just of economic growth, but also of a growth which would improve the life of the common man”. - **Manmohan Singh**
- “Reform is not an event, it is an process. We will continue to push forward the cause of reform.”- **ManMohan Singh**

#2 Through Definition/ Explanation:

Economic reform includes policies directed at achieving improvements in economic efficiency, either by eliminating or reducing distortions in individual sectors of the economy or by reforming economy-wide policies such as tax policy and competition policy with an emphasis on economic efficiency, rather than other goals such as equity or employment growth. **Economic reforms in India refer to the structural adjustments that were initiated in 1991 with the aim of liberalising the economy and to accelerate its rate of economic growth.** The reforms were aimed at attaining a high rate of economic growth, reducing the rate of inflation, reducing the current account deficit and overcoming the balance of payments crisis also with respect to industrial licensing, technology up gradation, removal of restrictions on the private sector, foreign investments and foreign trade. Three decades ago India embarked on a new economic journey when Manmohan Singh, then Finance Minister, placed the reform Bill and echoed **Victor Hugo**, “**No power on earth can stop an idea whose time has come,**” in Parliament. Since then, the crisis-hit economy has come a long way and marked its firm presence in the global platform.

Body Content:

India has completed 30 years of its economic reform. Due to these reforms, India has strengthened its position economically and made great progress. But it is imperative to know what were the necessary conditions due to which India had to adopt economic reform. Like David Cameron once said “**Economy is the beginning and end of anything, if you don't have a strong economy, you can't make any concrete reforms.**”

Before the introduction of economic reforms, the industrial sector suffered due to bureaucratic controls. Industries had to obtain many licenses and permissions- ‘**License Raj**’ for any undertaking activity such as

setting up a new firm, starting a new product line, expansion of existing business, foreign investment etc. Many public sector enterprises were incurring huge losses due to poor productivity. The fiscal deficit was widening. This was mainly due to an increase in non-developmental expenditure of the government. The government had to borrow huge amounts of money to meet the deficit and to meet the interest obligations on these loans. Government was trapped in a 'debt trap'. Thus, there was a need to bring in reforms to reduce non-developmental expenditure and bring about fiscal discipline.

Continuous borrowing by the government to meet its increasing expenditure led to a rapid increase in the money supply. The government resorted to deficit financing in which the RBI borrowed money by the Government of India by printing currency notes. This increased the money supply. When the money supply increased, the demand for goods and services also increased, raising their prices and creating inflationary conditions. By the early 1990s, India was battling **double-digit inflation**, a **gross fiscal deficit was above 7.5 percent of GDP**, **internal debt was close to 54 percent of GDP** and foreign exchange reserves stood at a fortnight's worth of import bills.

The Gulf War had a significant impact on the supply of oil during 1990-91. As a result, the price of oil increased, increasing India's foreign exchange outlay. The Gulf crisis also affected the inflow of foreign exchange into India. NRI deposits were moving out of India and remittances from Indians working abroad were also affected during the war.

The political situation in India was also quite volatile in the early years after 1990. The National Front government fell in November 1990. The Chandrashekhar government was very short-lived. The Congress also ensured that Finance Minister Yashwant Sinha could not present the full budget for 1991-92 at the end of February. This was a major political blow to the Chandrasekhar government's ability to handle the economy.

Neither the government could outline its policy action to stem the economic fallout, nor could it use the package to seek more funding from multilateral financial institutions such as the International Monetary Fund (IMF) and the World Bank. India's foreign exchange reserves were depleting and Non-Resident Indians (NRIs) were withdrawing their deposits. This put more pressure on the country's balance of payments and the ability of the government to finance itself was under pressure.

In the midst of political instability, high inflation, rising fiscal deficit, payments crisis and immense pressure from international organizations such as the IMF and the World Bank, India initiated economic reforms in 1991. With the introduction of economic reforms, many restrictions on the industrial sector were removed.

Liberalisation started with a dose of devaluation and was followed by slew of policies which together were famously termed as **LPG (Liberalisation, Privatisation and Globalisation)** reforms. As is always the case, the change was not welcomed by all. There was political resistance from within and outside the ruling party since many were not sanguine about its success. How does an economy comprising 891 million people take a U-turn? For every change that Prime Minister P.V. Narasimha Rao introduced in 1991, there was a **putrefying ecosystem** of decaying politics, rent-seeking inspectors, entrenched businesses, all bound together by a 'system' of vested interests and articulated by the Bombay Club that had to be dismantled. On the one side was the rise of a new politics of growth, driven by new entrepreneurs. In the middle lay an ocean of opportunities. Every clause in the Statement on Industrial Policy 1991 had thousands, if not hundreds of thousands, of people benefiting from and immersed in the inertia of the past business as usual. Several of these had money power - not just a handful of industrialists but the bureaucracy, the politicians, the 'system.'

The Good, the bad and the Ugly

Although it is not entirely true to say that economic reforms were only a necessary condition and not a satisfactory condition, many such positive changes were seen, due to which these reforms appeared to be sufficient for that time. The reforms had an impact on the socio-economic fabric of India. **From about 45% of the population below the national poverty line in 1994, the rate has dropped to 21.9% in 2011. Literacy rate, Gross Enrolment Ratio and life expectancy have also improved.**

Post-reform growth rates have been less volatile as compared to pre-reform years, due to an increase in the share of services in the precarious agriculture sector. The coefficient of variation in the annual growth rate of GDP decreased from 80 percent during 1961-1990 to 30 percent in 1991-2020. Inflation and government deficit also turned into acceptable figures.

Thanks to **prudent macroeconomic stabilization** policies including devaluation of the rupee and other structural reforms, the BoP crisis ended by the end of March 1994 and foreign exchange reserves increased to US\$ 15.7 billion. There has been a huge increase in the inflow of both FDI and FII into India. Through reforms, India overcame its worst economic crisis in a remarkably short span of two years. India also rapidly integrated its economy with the global economy. The proportion of total exports of goods and services to GDP in India almost doubled from 7.3% in 1990 to 14% in 2000. The reforms led to increased competition in sectors such as banking, leading to greater customer choice and increased efficiency. This has also led to increased investment and growth of private companies in these sectors. **Thirty years down the line, from a GDP of \$512.92 billion in 1991, India had grown to a \$2.70-trillion (in constant 2010 US\$) by 2020. Besides, the average annual growth rates in GDP, post the 1990s, have been around 6.25 per cent against 4.18 per cent for the three decades prior to the reforms.**

1991 Economic reforms improved the economic condition of the country and removed many problems but there was a scope for improvement on a large scale. Somewhere it got missed, that's why economic reform did not prove to be sufficient condition. A major criticism of the reforms has been that it has **widened the gap** between the rich and the poor. **World Bank estimates show that the Gini index, a measure of income inequality, has deteriorated marginally from 31.7 in 1993 to 35.7 in 2011.**

Reforms were mainly in the **'formal sector'** of the economy with agriculture, the urban informal sector, forest dependent communities and other vulnerable sections not seeing any major improvement. This led to unequal development and unequal distribution of economic freedom among the people. Economic liberalization (subject to stricter labour laws) in the organized manufacturing sector has led to growth with little additional employment. Another attack is that with the creation of heavily mechanized industries in urban areas, the rural population started migrating to towns and cities on a large scale, making the problem of unemployment more acute and complicated.

Arvind Panagariya in one of his papers has assessed the LPG reforms. He believes, that the accomplishments of the past decade are dwarfed only by what remains to be done. To begin with, the fiscal deficit is in a dire state. The combined deficit at the center and states exceeds 10 percent of GDP. Given an already high debt-to-GDP ratio of nearly 60 percent, this deficit is unsustainable; it is also **crowding out private investment**. From the viewpoint of long-run growth, the "old economy" must be further unshackled. A key deficiency of India's growth process has been the failure of the conventional industry to pull workers out of agriculture into gainful employment. Today, in contrast to virtually all successful developing economies, **approximately 60 percent of India's workforce still remains in agriculture - directly or indirectly.**

The revival of conventional industry requires reforms in **key areas**. First, a large number of highly labour-intensive products remain reserved for small-scale producers. As a result, the labour-intensive industry has been scuttled in India and, with trade liberalization, will find it almost impossible to survive. This reservation must end with small-scale producers given assistance through alternative measures rather than a total ban on large-scale entry. Privatization of public sector enterprises needs to be speeded up. With almost two thirds of the industrial output of the organized sector in these enterprises, it will be difficult to stimulate industrial growth in the short to medium run without faster privatization. Finally, trade liberalization must proceed apace with all tariffs brought down to 15 percent or less. Again, this is necessary to reallocate production toward labour-intensive products in which India has 'comparative advantage'. It will also be salutary for poverty reduction.

Infrastructure is another important area of reforms. Roads, railways, and ports all need expansion as well as improvement in the quality of service. The government has recently taken steps in this direction, particularly in the area of roads, but the pace remains slow. The most important area of reforms is perhaps India's power sector. Virtually no sector of the economy—industry, agriculture, or services—can achieve successful transformation without adequate supply of power. The power sector has been a government monopoly at the state level and suffers from proverbial inefficiency including large-scale thefts of electricity in almost every state. Reforms involving privatization of power generation and distribution have been undertaken in several states recently but no spectacular successes have emerged as yet. This is the area with highest payoffs for imaginative reforms.

Fertilizer and food subsidies pose yet another challenge. As much as 0.7 percent of GDP goes into fertilizer subsidies. Contrary to popular impression, much of this subsidy goes to support the inefficient domestic fertilizer industry rather than farmers. In the last five years, the prices for fertilizer paid by farmers have been close to the world price. Guaranteed rates of return to fertilizer manufacturers have allowed firms with costs two to three times the price in the world market to stay in business. Likewise, the bulk of the food subsidy has failed to reach the poor. Between food and fertilizer subsidies, there is scope for generating savings worth more than 1 percent of GDP.

Economic reforms of the last decade have virtually bypassed agriculture. Besides fertilizers among others, farmers need adequate supply of water and electricity. Currently, these are provided free of charge but their supply is highly unreliable. Farmers must also be able to reap the full market price for their product rather than be subject to a procurement price below the market price. Further, export restrictions must be phased out.

Financial sector reforms, particularly the reform of banking, remain a distant goal. While foreign banks are now allowed freely to open branches in India, they have not yet moved in aggressively. Banking sector privatization will take time but large efficiency gains could be achieved if labour laws are reformed to restore the hire and fire policy. Layoffs in banks have been very difficult, and voluntary retirement schemes extremely costly.

Finally, the reform of bureaucracy is essential. The problem of a bloated bureaucracy and the need for downsizing it is well recognized. But with policy making becoming an increasingly sophisticated and specialized activity, it is necessary to open the top bureaucracy to outside specialists.

Market-based economic reforms also often lead to growing inequalities between rich and poor, and between structurally backward and more developed states. Social sectors such as health and education have been neglected. These areas, although very important, were not focused and the result can be seen in the disappointingly low levels of education and health indicators today. A major reason for the rising inequality is the heterogeneity of the Indian population, leading to varying adjustment capacity. The inequalities also can stem from structural changes induced by the reforms.

The debate between **big bang reforms** of enabling the mechanism of 1991 and the **gradualism** that followed over the next thirty years continues in 2021. Both have worked. While the Statement on Industrial Policy 1991 reframed the foundations of economic policy; ended the dominance of the State in allowing businesses to be set up, grow or diversify; the reforms that have followed since then have been a mix of both. The gradual cut in direct income tax rates across governments or the sequential setting up of regulators (capital markets under ex PM P.V. Narasimha Rao, insurance and pensions under Ex PM Atal Bihari Vajpayee, real estate under PM Narendra Modi) has been gradualist in approach, mixed in outcomes. That of the goods and services tax or the farm laws is a mix of both gradualist arguments over decades and its executive conclusion by law.

On the other side of the velocity spectrum lies Manmohan Singh's Mahatma Gandhi National Rural Employment Guarantee Scheme that offered social security to millions by its enactment and Narendra Modi's Jan Dhan Yojana that overnight gave 300 million unbanked citizens bank accounts. It is difficult to decide which is the more efficient route. Economists may seek a 'big bang' but **politics needs the balm of democratic conversations through gradualism**. On the other hand, gradualist policies can be discussed until death, while the 21st-century India needs agile policy decisions. At this moment, agility seems like a distant dream, but given the ongoing pandemic and the economic crisis emanating from it, India's politics may well deliver a new growth orbit.

Conclusion:

Therefore, we can say that there were many such necessary conditions behind adopting economic reforms, on which we had to adopt economic reforms to improve, although it did not prove to be completely sufficient but it helped a lot in development and currently, we have to face those shortcomings. We need to consider the shortcomings of our policy and adopt our economic reforms according to the current situation. Converting a crisis into an opportunity is riskier than it sounds. In the current scenario, India needs to act quickly to avoid an imminent crisis, so we have to change economic policy: create confidence, foster investment, cut the public deficit, restructure taxation and reform the labour laws so we can live in happy and a developed country. Like Tyler Cowen once said "**Economics is everywhere, and understanding economics can help you make better decisions and lead a happier life**".

Q.2) Tackling climate change requires change in human attitude.

जलवायु परिवर्तन से निपटने के लिए मानवीय दृष्टिकोण में बदलाव की आवश्यकता है।

INTRODUCTION**#Quotation Based**

“Climate Change is no longer some far-off problem; it is happening here, it is happening now.”

- Barack Obama

“Climate change is the environmental challenge of this generation, and it is imperative that we act before it's too late.”

- John Delaney

“Although the magnitude of climate change may make individual feel helpless, individual action is meaningful for critical change.”

- Mia Armstrong

“The time is past when humankind thought it could selfishly draw on exhaustible resources. We know now that the world is not a commodity.”

- Francois Hollande

“We do not inherit the earth from our ancestors. We borrow it from our children.”

- Native American Proverb

“A nation that destroys its soils destroys itself. Forests are the lungs of our land, purifying the air and giving fresh strength to our people.”

- Franklin D. Roosevelt

#Anecdote Based

The forest fires have become a recurrent phenomenon in the many states of India. They are growing larger, spreading faster and reaching higher, scaling mountain elevations that previously were too wet and cool to have supported fires this fierce. They are also getting more intense, killing a greater number of trees and eliminating entire patches of forest. One such event led the people of a small hamlet in Uttarakhand to come together and pick up the left over cones, burnt matches, cigarette butts and other flammable materials from the forest patches. The next season saw relatively less intensive fire season. The story here highlights how with the right attitude any problem as large as climate change can be addressed.

#Body Content

Climate change describes a **change in the average conditions, such as rainfall and temperature in a region over a long period of time**. Global climate change refers to overall change in the average conditions of earth. Earth's climate has changed throughout the history, but the **current warming trend is of particular significance because of the pace at which it is taking place**. Human actions, beginning with the industrial revolution, have played a significant part in this. Since then, the planet's temperature has climbed by more

than 1 degree Celsius. The **previous decade (2011-20) was the warmest on record**, with the warmest years being 2016 and 2020.

The **oceans**, which operate as a carbon sink and play a critical role in controlling the earth's energy balance, are warming. **Ice sheets are shrinking**, with ice sheets in Greenland and Antarctica witnessing large decrease; and **Glaciers are retreating** almost everywhere around the world (the Alps, the Himalayas etc.). There is **fast melting of snow**, with various scientific evidences revealing the decrease of snow cover in Northern Hemisphere in the last 5 decades. **Sea level is witnessing a rising trend** in recent years, and **the thickness and extent of Arctic sea ice is showing a declining trend**. **Extreme weather events** are becoming a common occurrence. According to a study, average **United States temperatures have increased since the late 19th century**. Presently, **U.S. and Canada are witnessing heat waves**, which has led to many deaths.

Due to climate change: **many species are facing the threats of extinction**; shrinking ice sheets are threatening the Snow bears; warming of sea and rising level will lead **to extensive damage to coral reefs**, the tropical rainforests of the sea. Australia's **Great Barrier Reef** has lost more than half of its **corals** since 1995 due to warmer seas driven by climate change, a study has found. According to the **world economic forum's Global risks report**, around 90% of all coastal areas will be affected by the rising sea levels. Forest fires are showing an increasing trend; global temperature rise is also seen as a reason behind **Australian bushfire (2020)**. **Tropical region diseases like Dengue** etc. may witness a rising occurrence. **Water stress will increase and crop yields will witness a change**.

Climate change needs to be tackled, otherwise it will have devastating impacts for the environment. Corona virus and imposition of lockdown in various parts of the world last year shown the role of human activities in climate change. **The Earth Overshoot Day** (The day marks the **date when humanity's demand for ecological resources** and services in a given year **exceeds what the Earth can regenerate** in that year) which was observed on 29th July in 2019 shifted to 22nd August in 2020, change witnessed because of low human activities.

Therefore, **human attitude needs a change**. We have a tendency to wait till things start impacting us. At present major impact of climate change is being witnessed by Small Island Nations, so many of the people from developed economies are not even accepting the evidences about climate change, these attitude needs a definite change.

Increased use of fossil fuels is held responsible for **increase in Greenhouse gas (CO₂ etc.) emissions**, which is leading to Global warming. There is a **need to move towards cleaner sources of fuel like CNG (compressed natural gas)**. There is a need to **promote the increased use of ride sharing and public transport** in place of personal vehicles. Public transport should be made fast, efficient and affordable with last mile connectivity. **City infrastructure need to be upgraded** in a way that the distances can be covered by walking and using bicycles only resulting in decreased carbon footprint.

There is a **need to minimise food loss and wastage throughout the food supply chain** from harvest to consumption. The **UN Food and Agriculture Organization (FAO) estimates** that one-third of global food produced for human consumption does not reach end consumers.

Using efficient cook stoves and fuels in place of traditional cook stoves. There are around three billion people who rely on cook stoves and biomass fuels. This leads to emission of Greenhouse Gases (GHGs) not

only because of cooking process but also through harvesting fuels from forests, the combination of which contributes 2-5 percent of global greenhouse gas emissions.

Urban areas produces huge amount of waste, which is composed of high organic matter. Anaerobic decomposition at landfill produces methane (GHG). **Composting enables the conversion of organic waste into stable soil carbon without generating methane**, which can then be used as fertilizer to improve soil health.

Planting of trees along with annual crops increases the carbon content of soil as well as improves the land productivity. Intensive use of fertilizers, high amount of water usage, sowing of water intensive crops like Rice etc. year after year has led to declining soil quality and poor water availability. Increasing aridity is witnessed in many parts of the world including India. We need to move towards crop rotation, reduced or no tillage and green manures. Paddy cultivation is known for high GHG emissions, **system of rice intensification technique which leads to low methane emission is to be used.**

Agriculture consumes 70 percent of the world's freshwater resources. Irrigation systems require high energy inputs to pump and distribute water, making irrigation a source of carbon emissions. **Improved irrigation technologies, like drip and sprinkler methods**, help farmers use water more precisely and efficiently. **Rainwater harvesting and proper water management practices need to be adopted.**

Shifting agriculture practiced in many parts of the world including India's Northeast led to deforestation, it needs to be controlled.

Household efforts like use of LEDs in place of normal lights, saving of waters, rooftop solar water heaters and construction of houses in way that natural light covers most of the area etc. are required.

Cities have become urban heat islands because of high concretization, lack of green vegetation, increased use of air conditioners etc. **Use of light coloured concrete in construction, planting of trees etc. can help.**

Green building codes like GRIHA need to be properly implemented.

One thing that needs a change is looking development and environment separately. Development needs to be made sustainable.

Conclusion:

Climate change is a reality and we need to tackle it, otherwise it is already becoming a threat for the environment and human survival. Various international climatic agreements are signed (**Paris Climate deal, Kyoto Protocol and one of the most successful Montreal protocol**) and domestic policies are being framed and they are giving increased emphasis on individual contributions. Initiatives like International Solar Alliance, assistance from developed to developing and poor economies etc. are in the right direction. Various studies have shown that even if every country fulfil its commitments under Paris climate deal, we cannot limit the temperature rise, so more efforts are required. India is also promoting the increased use of renewable sources of energy, electric and hybrid vehicles through various policy initiatives. People need to be made more aware about climate change and various climate friendly techniques. Small effort from each one of us can help tackle the impact of climate change.

Physical science has made clear what actions we must take to fight climate change, but it is high time that we tuned our mind and soul towards nature to bring about the large-scale change we need to save the planet.

Q.3) Digital education – possibilities and challenges.**डिजिटल शिक्षा – संभावनाएं और चुनौतियां।****INTRODUCTION****#Quotation Based**

"We need to bring learning to people instead of people to learning."

- Elliot Masie

"Education is the most powerful weapon which you can use to change the world."

- Nelson Mandela

"Education is the kindling of a flame, not the filling of a vessel."

— Socrates

"Education is the passport to the future, for tomorrow belongs to those who prepare for it today."

- Malcolm X

"The educated differ from the uneducated as much as the living differ from the dead."

— Aristotle

#Anecdote Based

A young science teacher, Basavaraj Sungari, working in a village in Belagavi uses augmented reality and virtual reality tools to teach children online. He created videos for his students during the extended lockdown period. An avid user of new-age technological tools, he has created 3D content using mobile and desktop applications. He has also been using some video editing tools to create videos in Kannada to explain physics, chemistry, and biology concepts. He is using Arloopa, a mobile app that helps artists embed their videos with images or videos using augmented reality and virtual reality technology. His use of online tools has provided continuity to the education of the students of the village which would have otherwise disrupted their learning.

Body Content

Education is the process of facilitating learning, or the acquisition of knowledge, skills, values, morals, beliefs, and habits. It is a process of imparting or acquiring knowledge, developing the powers of reasoning and judgment. Education has the ability to prepare a person intellectually and give right direction to one's life. It improves not only the personal life of the people but also their community. Thus, one cannot neglect the significance of Education in life and society. Societies with high rates of education completion have lower crime, better overall health, larger economic development and social bonhomie. At the individual level it results in higher incomes, better livelihood opportunity, good health and productive lifecycle. It has the ability to shape one's life in the right direction.

The format of education delivery has changed over the centuries, starting, from traditional Vedic education under the 'Guru-Shishya parampara' to the modern Woods dispatch of the British. The present classroom model of education has been around for the past one fifty years but the advent of internet technology has completely changed the face of education. The handicaps of distance and funds pose no more challenges the way it was.

Technology based delivery of education is known as e-learning. A concept where Information and Communication technologies are used to deliver educate even to remote areas in a more inclusive, engaging and scientific way. E-learning has the potential to revolutionize education because of the flexibility, accessibility, wider choices, customization and cost.

Unlike the traditional classroom model, online education enables the teacher and the student to set their own learning pace, allowing greater flexibility in fixing schedules for classes. This results in improved balance of work and studies, which reduces compromise on other aspects. Students in higher studies can dedicate the spare time towards research, learning, and projects. This flexibility is a departure from the old mundane model where school/class was the only place considered for learning. E-Learning has changed the boundaries of education to a make it a 24*7 service.

Internet is a wide and vast cyberspace and there are infinite skills and subjects to teach and learn. A growing number of universities and higher education institutions are now offering online versions of their programs for various subjects and disciplines. From quantum physics to Indian classical music, there are plenty of options for every student. This has allowed many students to choose variety of courses which are not available in nearest school or colleges. This will boost creativity and bring fresh blood into disciplines which lacked student populations due to shortage of admissions.

One of the greatest benefits of online learning is its **reach**. It is not confined to concrete structures. Any curious person sitting in the remote village of Ladakh or Arunachal Pradesh can have access to high technology online material and learning. Government of India has launched **SWAYAM** portal as an extension of its Digital India campaign. The portal offers free printable and downloadable study materials, video lectures, discussion forums, and online tests from over 1600 courses. After successful completion of the course, students are eligible for a completion certificate. So the deprivation faced by those who did not have schools and colleges in vicinity diminished greatly. Similarly targeted programs of AICTE,IGNOU, NIOS, IIMs and UGC are revolutionizing education.

E-learning significantly **reduces the cost of education** and makes it affordable for students who belong to economically backward families. As e-learning does not require learners to travel to schools and colleges, it serves as a great financial relief to middle class and poor families. Also, there is no need to invest in any specific tool or learning resources apart from a computer or mobile phone. Learners just have to log in to the application or portal at any point of time, which also removes the need to spend on textbooks or other course materials. The online data repositories act as online libraries are supplementing e-learning for learners. Schemes like **National Digital Library of India** and e-Shodhsindhu attest it. E-ShodhSindhu is a digital library providing access to e-resources like journals, eBooks, factual, bibliographies, citations, etc. for higher education. All academic institutions like central and state universities and colleges can avail of the services.

E-learning not just saves financial resources of the scholars but also the Union and the State Governments. The funds require to raise brick and mortar institutions will drastically be saved and used for improvement in quality of online education. The State can work more on improving digital infrastructure, internet bandwidth, servers, manufacturing of digital learning devices etc.

E-learning will greatly benefit in bridging the educational divide between the 'haves' and the have 'nots'. The vulnerable SC, ST, minority, LGBTQ and Divyangs will vastly benefit from it. It is generally seen that in these classes there is paucity of education due to various deprivations, historical and social. It will give

them a chance to rise up on their feet. Schemes like Standup India and Startup India, Skill India can only succeed with a productive and learned human resource. Poor or illiterate adults in villages, single women, semi-skilled personnel, disabled can vastly improve their livelihood opportunities using the e-learning modules.

But the state with its various complexities and limitations faces tremendous challenges in making available the e-learning fully to the public. From budgetary allocation to digital infrastructures and teacher training to learning outcomes, the state faces various hurdles in making e-learning truly successful.

One of the biggest challenges with regard to online learning is the lack of strong and stable internet connections, especially in remote areas and rural interiors. For this, stronger servers, supercomputers and better fiber optic cables are needed. Improvement in user interface and user friendliness of software has to be improved. Another issue observed during the pandemic that the process of logging in for a class itself becomes a cumbersome process for students and teachers. Thus minute issues like these need to be ironed out.

Further concerns about data privacy and security need to be addressed. Usually, teachers conduct online classes through free platforms such as ZOOM and Google Classroom which are not the safest platforms from cyber security point of view. Institutions dealing in learning material, Intellectual property, research, thesis and related sensitive content need to be sensitized and security standards and protocols be followed in them.

In addition to above, digital illiteracy and digital divide between the urban and the rural India can pose significant hurdles in e-learning. The access of digital resources is different for various classes and social groups in India. The state, through its efforts, need to make the citizenry train in using digital platforms. Availability of infrastructure does not guarantee its usage. Therefore Panchayats, Local bodies, Self Help groups and NGOs need to be roped in to train people at large and develop learning motivation.

“The goal of education is advancement of knowledge and dissemination of truth”, said John F Kennedy. Education is a single way journey to productive and dignified life. It has the potential to turn millions of lives. It has the power to reverse thousands of years of darkness and deprivation. As our societies evolve to a more complex socio-economic scenario, our education system and methods of its delivery must reform too. Technology is merely a medium but knowledge is the ultimate goal. And in these changing technological times e-learning has the potential to revolutionize education.

Goerge Couros, a teacher in innovative learning in Canada, says that technology will never replace great teachers but technology in the hand of great teachers will be transformational. Hence, as a society, we will have to be receptive towards this digital ecosystem and hope for a stronger, digitally progressive nation.